PAPER TRADE JOURNAL

PAPER
Is Combined with Paper Trade Journal

Vol. LXXXI. No. 24 DECEMBER 10, 1925 Per annum, $4.00 Per Copy, 10 cents

All Frederick Pumps are high grade products. They are priced as such, but are not excessively priced.

The Frederick Single Stage Single Suction Open Impeller Pump is designed especially for paper mill service. It is heavy and rugged in construction, and superior in mechanical design. It can be furnished with its super stock attachment to facilitate the handling of heavy stock.

Experience has proven that this pump gives efficient service for an unusually long period of time. It is a Pump that anyone, considering the purchase of pumping Equipment, should investigate.

The Frederick Iron and Steel Company

FREDERICK, MARYLAND

In Canada—DOMINION ENGINEERING WORKS, LTD., Lachine, Que.

Entered as second class matter August 13, 1925, at the Post Office at East Stroudsburg, Pa., under Act of Congress of March 3, 1879 — ESTABLISHED 1872 FIFTY-THIRD YEAR — Published every Thursday by the Lockwood Trade Journal Company, at 24 North Crystal St., East Stroudsburg, Pa.

EXECUTIVE AND EDITORIAL OFFICES: 10 EAST 39th STREET, NEW YORK CITY

CHICAGO: 123 West Madison, Chicago, Ill. BOSTON: 185 Federal St., Boston, Mass.

Hytor bearings typical of superior Hytor construction

Nash Dryer Exhaust Unit, Size F, handling condensation from paper machine dryers at Eastern Mfg. Co., So. Brewer, Me.

In keeping with the superior construction of every part of a Nash Hytor, high grade ball bearings are used to support the rotating pump impeller. These are oversize to assure adequate shaft support and liberal radial and thrust load capacity. They are mounted outside of the casing in tightly sealed housings, which prevent dust and dirt from getting into the bearings. As a result, the bearings are virtually free from wear.

Superior Hytor construction assures the characteristic superior Hytor service.

NASH ENGINEERING COMPANY

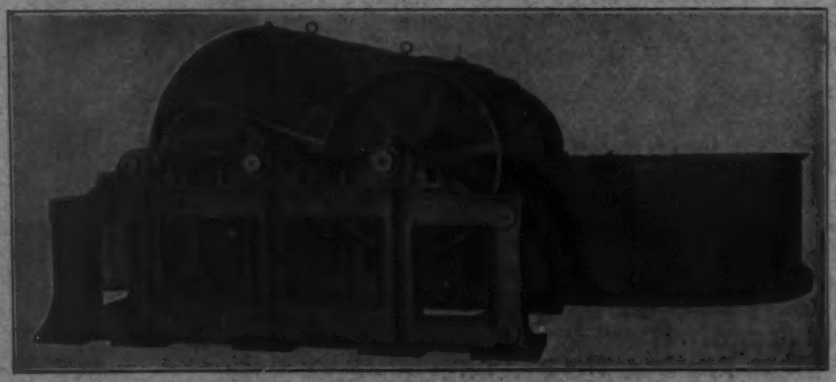
So. Norwalk Connecticut

New England Representative
Mr. G. H. Gleason, Nottingham Bldg., Copley Square, Boston, Mass.

Western Representative
Mr. T. H. Savery, Jr., 1534 Republic Bldg., Chicago, Illinois.

Nash Hytor

VACUUM PUMPS AND COMPRESSORS



The Paper Pulping Engine

This machine was designed primarily to assist in the economic utilization of the enormous stocks of waste paper produced annually in this country. It is also admirably fitted to successfully and quickly treat ground wood and chemical pulp in whole laps; all classes of machine broke; mixed paper stock of all kinds: large catalogs, books, telephone directories, etc., without tearing them apart; machine or roll butts without unwinding: all with a minimum of labor and expense.

Write for Booklet:—

Cutting Production Costs With the Paper Pulping Engine

THE NOBLE & WOOD MACHINE CO., Hoosick Falls, N. Y.

DYES FOR BLOTTING PAPER

THIS class of paper calls for shades of considerable brilliancy, and requires the use of colors suitable for application, without size or alum. For this purpose we recommend National Direct Dyes used alone or in combination with the National Basic Dyes. With a selection of dyes from these foregoing groups, the paper dyer is in a position to match practically every shade submitted or to add to his present line of shades.

National Aniline & Chemical Co., Inc.
40 Rector St., New York, N.Y.

BOSTON PHILADELPHIA SAN FRANCISCO
PROVIDENCE CHICAGO MONTREAL
HARTFORD CHARLOTTE TORONTO

NATIONAL DYES

PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-THIRD YEAR

Published Every Thursday by the
LOCKWOOD TRADE JOURNAL CO., Inc.

LESLIE R. PALMER, President — GEO. S. MACDONALD, Vice-President & Treas. — F. K. HOPPIE, Secretary

Executive and Editorial Offices: 10 East 39th Street, New York
Boston Office: Room 37, 127 Federal St., Boston, Mass.
Chicago Office: Room 14, Suite 410, 123 West Madison St.

TABLE OF CONTENTS

Copyright, 1925, by Lockwood Trade Journal Co., Inc

Maxwell Howard Buys American Writing Plant.. 21
Rumors of Other Canadian Mergers 23
The Belgo-St. Maurice Deal 23
International Harvester To Buy Mill 23
Whalen Pulp Deal Completed 23
News Print From Nipigon Lands 23
Proposed Mill in Tasmania 24
Active Paper Demand in Chicago 26
Chicago Paper Association Formed 26
Mac Sim Bar Paper Co. Retiring Bonds 26
Philadelphia Paper Mills Busy 28
A. A. Datz & Son to Move 28
Herbert W. Mason Leaves Dill & Collins 28
To Learn of Champion Coated Papers 28
Thomas S. Carey in Paper Business 28
Expansion for Enterprise Paper Co. 28
Mill Activities in Fox River Valley 30
Accident at Hoberg Paper Co. Plant 30
Kimberly-Clark Hold Safety Meeting 30
W. C. Hamilton & Sons Move N. Y. Office 30
New York Appraises Upheld on Wrapping 30
The Textbook Job Completed 32
List of U. S. Contributors to Textbooks 32
Paperboard Association Meets 36
Great Britain Wants Duty on Wrapping 38
Muskegon Plant Damaged by Fire 38
New York Trade Jottings 39
Editorial 40
Technical Section
Beating 43
The Crossley Pulp Sampling Tool 44
The Armstrong Drainage System 45
Current Paper Trade Literature 47
Waste Liquors and Gases of the Paper Industry 50
Cost Section 53
Construction News 58
Imports of Paper and Paper Stock 59
New York Market Review 64
Miscellaneous Markets 66
Market Quotations 68

Want and For Sale Advertisements, 70, 71, 72, 73

McNamee Clay

No. 1 Mine—Mining in the Clay Pit.

50,000 tons produced annually in South Carolina

McNamee, S. C., is located close to the through road to Florida—approximately midway between Aiken and Augusta. We extend a cordial invitation to any of our friends touring South to visit us and obtain first hand knowledge of clay mining and our facilities for serving our trade.

R. T. Vanderbilt Company

50 East 42nd Street
NEW YORK

McNamee Superfine Clay

The new No. 2 Mine—Mining on first level. More than a year's supply of clay uncovered.

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

PAPER

The Magazine of the Paper Industry

Vol. LXXXI, No. 24 Thursday, December 10, 1925

Maxwell Howard Buys American Writing Plant

Important Deal Involves Initial Outlay of $214,500—Water Power Privileges Previously Acquired for $250,000—To Expend $1,500,00 on Additions to Present Mill Buildings and New Machinery—New Development to be Organized Under Name of Maxwell Paper Co.—Plants to Have Capacity of 150,000 Pounds of Writing Paper Per Day

Purchase of the Harding Division of the American Writing Paper Company, located at Franklin, Ohio, which has been idle for some years, the deal involving an initial outlay of $214,500, in addition to a former expenditure of $250,000 for water facilities, and a further outlay of $1,500,000 for rehabilitation, has been announced by Maxwell Howard, president of the Aetna Paper Company.

T. A. Jones, acting as agent for Mr. Howard, purchased the Harding Division of the American Writing Paper Company at Public Auction at Lebanon last Friday, for $214,500. The sale was necessitated by a receivership of the American Writing Paper Company, of Holyoke, Mass.

The purchase of the buildings does not include the water power privileges, which had been acquired previously, at a private transaction, for $250,000. These rights and privileges will be developed to their fullest extent, states Mr. Howard, and will form a valuable asset independent of the paper mills.

Plans to Erect Additions

All the present machinery and equipment of the mills is to be moved and scrapped, declares Mr. Howard, and work is to start immediately on the repair and remodeling of the plant, including the building. It is the plan to erect additions to the present mill buildings, which, together with new machinery, will cost approximately $1,500,000.

When completed, the plant will have a capacity of 150,000 pounds of writing paper a day, and will employ more than 500 persons. It will probably be about six months before they are in operation, states Mr. Howard.

The Harding Devision was founded about 1885 by a Mr. Harding, who lived in Excello, and was gradually developed, until it was bought by the American Writing Paper Company in 1898. It has been idle for several years.

Properties to Be Closely Associated

The property is to be closely associated with the Howard Paper Company, of Urbana, Ohio, which Mr. Howard started in 1910, and the Aetna Company, of Dayton, Ohio. The latter company, organized as the White Paper Company about 1885, was purchased by Mr. Howard in 1896.

The new development will be organized under the name of the Maxwell Paper Company. Mr. Howard will be the president and the personnel will be taken from that of the other two companies. The capital is to be listed at $2,000,000. There will be no bonds

VIEW OF THE HARDING MILL AT FRANKLIN, OHIO, PURCHASED BY MAXWELL HOWARD

WATER POWER FACILITIES AT FRANKLIN, OHIO, ACQUIRED BY MAXWELL HOWARD

nor will the stock be placed on the market or be available at private sale, Mr. Howard declares.

The new company will manufacture the same lines as the Aetna and Urbana mills.

Officers of the Aetna Paper Company, the parent firm of the chain, are: Maxwell Howard, president; C. E. Huffman, vice president; H. H. Howard, treasurer, and H. H. Hoffman, secretary.

Officials of the Howard Paper Company at Urbana are: Maxwell Howard, president; Ward R. Howard, vice president; H. H. Howard, treasurer, and L. S. Howard, secretary.

To Make Cellufibre at Fort Edward

[FROM OUR REGULAR CORRESPONDENT]

FORT EDWARD, N. Y., December 7, 1925.—A special department has been established at the Fort Edward mill of the International Paper Company to handle the new specialty product which has been developed from several months experimental work. The new product is to be known as "cellufibre" and it will not only be manufactured at the local mill but all details of wrapping, shipping, etc., will be handled in Fort Edward. At present one machine is worknig on a 24-hour operating basis producing the new product. With the decision to start production and in view of the unusually large possibility of sales the company has also decided to order the necessary converting machinery so that it will be possible to handle everything at Fort Edward with the exception of the sales department. This machinery will be installed shortly and about 30 girls will be given employment in the shipping department handling the new product.

The initial showing of samples of "cellufibre" resulted in the booking of orders by the I. P. Co. for more than the entire output of the machine now running on the product for the next twelve months working on a 24-hour basis. The capacity of the machine is two tons in a 24-hour day. It produces a sheet with a 63 inch trim and is slit into strips nine inches wide and 30 feet long as it leaves the machine.

One of the older machines in the Fort Edward Mill has been reconstructed to produce the new specialty and it is understood that, as demand develops, another machine in the local mill will be transformed for one of the old machines in the Glens Falls plant, now idle, will be taken over for the purpose. Another special line that is being developed at Fort Edward is candy box padding or liner and it is said that this can be made on the same machine as "cellufibre."

As a result of the beginning of production on the specialty product numerous changes are being made and some new equipment being installed. Five new beaters have been added and work is now under way on repairs to the No. 1 boiler house. About nine feet of brick is to be removed from the top of the large smokestack to increase the efficiency of the boilers.

St. Maurice Co.'s Official Murdered

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., December 7, 1925.—The local members of the pulp and paper industry have been greatly shocked by the cold-blooded murder of Robert Tyhurst, manager of the St. Maurice Pulp and Paper Company, at St. Michael des Saints, on Friday night last.

The murder occurred as Mr. Tyhurst sat in his office with his back to the window. His assassin, seated in an automobile, which was slowly driven past the window, fired a rifle at him, and shot him through the brain, killing him instantly. Revenge is stated to have been the motive, and at the time of writing, arrests were said to be imminent.

The deceased was born in Hertfordshire, England, in 1899. He came to Montreal in 1907, and went into the pulp and paper business. He had an enviable war record. He went overseas with the Princess Pats and served with them and with the Lancashire Fusiliers. He served in both France and Russia and was twice wounded, once so badly that only a miracle of surgery saved his life. He leaves a wife and a three-year-old son.

Mush Ice Handicaps Holyoke Mills

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., December 7, 1925.—Holyoke paper mills suffered from a novel condition for two days last week, the formation of "mush ice" affecting the mills to such an extent that their power was greatly crippled and in some cases cut off altogether.

The snow storm of Monday fell in just the right temperature so that it did not melt in the canals but formed an endless body of a mushy snow mass that blocked the strainers to the penstocks heads to the mills and formed in especially deep masses at the lower end of the canals.

The city municipal power plant was shut down altogether and the city bought power from the Holyoke Water Power Company which also had a considerable additional demand for power from its plant. Wednesday things improved and the snow had all vanished Thursday.

John R. Booth Dead

John R. Booth, head of J. R. Booth Ltd., Ottawa, Ont., died Tuesday afternoon of this week after an illness of two weeks. Mr. Booth was aged 98 years, 8 months and 3 days. He had been in good health and constantly attended to his large paper manufacturing and lumbering interests until his last illness.

Rumors of Other Paper Mergers in Montreal

Buying Movement and Substantial Advance in the Price of Laurentide Co.'s Shares May Be Accounted for By Merger Negotiations—International Harvester Co. Said to Have Made Offer for Stock of the Beaver Cove Pulp & Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., December 7, 1925.—During the past week there has been a buying movement here in the stock of the Laurentide Company, and a substantial advance in the price of its shares has been registered. The rumors as to the cause of this vary, but in view of the Belgo-St. Maurice merger, the general opinion seems to be that the Laurentide may be affected by Merger negotiations.

The reports that the company has been offered from $90 to $100 per share for its stock and very substantial sum for its holdings of Laurentide Power, persist, it being also rumored that these offers have been declined. Some incline to the theory that the stock is being bought on the assumption that their company will eventually link up with the Belgo-St. Maurice merger, although any immediate step in that direction is disclaimed by those in close touch with the financial interests behind the amalgamation. Others, owing to the fact that some of the recent buying has been traced to New York sources, are inclined to believe that International paper might have its eye on this big Canadian company, to round out its representation in the St. Maurice Valley, where it is already firmly entrenched. Reasons are advanced by the latter as to why a rapprochement between Laurentide and International might be more plausible than with the Belgo-St. Maurice group. Attention is called to the big things that Mr. Grautein has accomplished already in the relatively short time that he has headed the world's leading producer.

Still others think that the outcome of the Belgo-St. Maurice merger, with both common stocks being cashed in at par or better, has called attention forcibly to the fine strategic position of Laurentide. It is generally recognized that the day of mergers in this industry is at hand and it is firmly believed that Laurentide will eventually figure in some amalgamation in its district. With both St. Maurice and Belgo going in at par or better, it is argued that such a company as Laurentide, with no bonds and no preferred stock and with the splendid equity in Laurentide Power, could not do worse than the other two mentioned, at the very least. Then again, confidence in the news print industry has been enhanced to a very great extent by the entry into the field of powerful local interests who seldom pick losers.

In addition to all this is the fact that the market for the commodity produced by this industry has astonished many by its strength throughout the year, and by the change in its outlook.

The Belgo-St. Maurice Deal

A new company called the St. Maurice Valley Corporation has been incorporated at Quebec and it is presumed that this is the company which will acquire all the assets of St. Maurice Paper Company, and, at least, 85 per cent of the common shares of the Belgo-Canadian Paper Company. It has been learned in quarters close to merger circles that the new company will issue about $8,700,000 6 per cent bonds and $6,800,000 preference shares, and will have a common share capitalization of 150,000 shares no par value. It is also learned that a holding company called the News Print Investment Corporation is about to be formed with a capitalization of 61,000 shares, no par value capital stock. A debenture issue of this company has been authorized and $2,500,000 debentures and the majority of the common shares have been sold for cash. The balance of the News Print Investment stock is to go to holders of St. Maurice Paper Company shares on the basis of one share for every five shares St. Maurice held, as intimated in the president's letter to the St. Maurice Paper shareholders. The shareholders of St. Maurice Paper Company have viewed this offer favorably, especially, as in addition to receiving $100 per share in cash, they will receive a substantial stock holding in the new holding company, in which will be lodged control of both companies entering the merger, and which, it is understood, will have a substantial earning power.

International Harvester to Buy Mill

It is reported from Vancouver that the International Harvester Company has made an offer to buy 60 per cent of the stock of the Beaver Cove Pulp and Paper Company, whose holdings are 150 miles north of Vancouver, and that a meeting of shareholders has been called for December 15 to consider the offer. It is said that conclusion of the deal will mean paying the claims of all creditors of the concern, amounting to about $2,000,000, and the erection of a $12,000,000 paper mill and a $4,000,000 saw mill.

Whalen Pulp Deal Completed

Representatives of the first mortgage bondholders of the Whalen Pulp and Paper Company have paid into the court at Vancouver the sum of $150,000, being the balance of $250,000 required to close the deal as far as the first payment was concerned within thirty days after the date of sales by the court. This money probably will be used to liquidate accounts of the receiver, who is still managing the company's operations. The plants of the Whalen Company are operating and making a good showing, not only from the manufacturing standpoint, but also from the marketing end, as the product is spreading into many profitable fields. I. W. Killam, of Montreal, president of the Royal Securities Corporation, who is associated with the Peabody Houghtelling Company in the purchase of the properties, will visit British Columbia shortly and look over the company's affairs.

400 Tons News Print Daily From Nipigon Limits

Further details of developments that are planned as a result of the recent award of pulpwood cutting rights on the Nipigon limits in the Province of Ontario come by way of Appleton, Wisconsin. This place is the headquarters of the Consolidated Water Power and Paper Company, which controls a Canadian subsidiary, the Thunder Bay Paper Company, of Port Arthur. It was this latter company which was given rights to cut pulpwood on a tract of 2,000 square miles of government-owned spruce lands north of Lake Superior. In referring to the cutting rights on 2,000 square miles, the despatch states that this represents over 1,200,000 acres, which is as large as three ordinary sized counties in Wisconsin. The grant, according to the officers of the company, will have no effect upon the company's Wisconsin mills, for which there is already a sufficient wood supply, but will mean an expansion of the company's business in Canada that within the next few years will double the present news print production of all its mills. Under the provisions of the agreement with the Province of Ontario by which the Thunder Bay Company will receive the timber from this great tract of land, the company must increase its production over a period of years.

The company guarantees to be producing 100 tons of paper per day by October 1, 1927, and 200 tons of paper per day by October 1, 1929, with the further guarantee that the production will eventually be increased to 400 tons per day, an amount greater than the combined printed paper production of the Wisconsin Rapids and Biron Mills. Cheap water power for the manufacture of paper will be available to the company from the Big Nipigon power

development project. The Consolidated Company will pay the Ontario Government for the pulpwood as it is cut, without acquiring possession of the land itself. It is further provided that the timber on the tract granted the local company is non-exportable, so that it can be used only as it is manufactured into pulp and paper on Canadian soil. The terms of this agreement, however, do not affect the status of other timber holdings of the company, which supply its Wisconsin mills. The Consolidated Water Power and Paper Company gained its first foothold in Canada four years ago when possession was acquired of a defunct pulp mill at Port Arthur. A Canadian corporation was organized to handle this property, which was called the Thunder Bay Paper Company, and the mill, rebuilt, is now producing 125 tons of pulp daily, which is being shipped to the company's Wisconsin mills.

Proposed News Print Mills in Tasmania

C. Hartlett, Canadian Trade Commissioner in Melbourne, Australia, writes that the Commonwealth Government has announced that proposals to pay a bonus of £4 per ton on news print and other papers manufactured from Australian hardwoods would be submitted at the next meeting of Parliament. Since the announcement of the amount of the bonus the Government is prepared to offer the company which has applied for assistance to establish the industry, has stated that the amount is insufficient to warrant them proceeding with the project. The bounty sought was £6 per ton, as well as higher duties on overseas imports. In view of the representations made as to the inadequacy of the assistance offered, the interested company has been informed that if a case were established, from further data to be submitted, the Government would consider additional assistance to enable the industry to be established. This the directors have undertaken to do in time for the Government to arrive at a decision before the company's option on suitable timber areas in Tasmania expires early in December next. In the meanwhile the following public comment by the Minister of Trade and Customs on the situation, and the extent to which the Government is prepared to assist the industry, is submitted for general information:

Courtesy of International Paper Monthly

THE FALLS ON THE GATINEAU RIVER

Picture taken about six miles above the confluence of the Ottawa and Gatineau Rivers near the City of Ottawa. The view is from the east bank of the river looking west at the site of the dam, and shows the construction work for the hydro-electric plant of the International Paper Company which will supply the power for its new news print paper mill to be erected nearby.

"The project placed before me by the company was that a paper mill should be erected in Tasmania capable of making up to 20,000 tons a year of news print and writing paper from Tasmanian hardwood at a capital expenditure of £600,000, and if the undertaking proved commercially successful consideration would be given to the expenditure of up to £2,000,000 to make the whole of Austraila's paper requirements. The many benefits of such an industry as this to Tasmania, and in fact the whole of Australia, were so obvious that the proposal demanded the sympathetic and careful consideration of the ministry. There is no duty on news print under the British preferential tariff, and under which Canada now also benefits. The duty on Scandinavian news print is £3 a ton, and the duty on various other paper that could be made is from 5 to 25 per cent. No proved information was available to the ministry regarding the costs, quantities, or qualities of the paper it was proposed to make, and exhaustive world inquiries were therefore made by me regarding costs, processes, and wages, so that the ministry might arrive at a conclusion as to what was required to enable the news print industry to be successfully established. The ministry determined that a bounty of £4 a ton, with a deferred duty, would be sufficient assistance to establish the new industry.

Courtesy of International Paper Monthly

THE CONSTRUCTION WORK ON THE GATINEAU

This shows the crusher and mixer plant being constructed in connection with the hydro-electric plant which the International Paper Company is building on the Gatineau River to supply the power for its new news print paper mill to be erected nearby.

"This would amount to the payment of £120,000 a year on the average to support an industry that would pay £200,000 in wages a year, and over the five years would mean an offer to pay £600,000 by the Commonwealth for the establishment of the paper industry. The capital expenditure necessary for the production of 30,000 tons of paper a year would be less than £1,000,000, so that the offer of the ministry was equal to a bounty of £120,000 a year for five years. The ministry was not influenced by the actions of newspaper proprietors, or by anyone else, in coming to their decision, but was actuated solely by a desire to see this valuable industry established."

Schnelle and Berry Now With Douglas Wray Co.

William F. Schnelle and John D. Barry, both formerly with the Whitaker Paper Company, announce their connection with the Douglas Wray Paper Company, of Chicago, and have opened offices at the Morgan Building, 429 Wayne street, Detroit.

MATHIESON Chemicals

Quality Is Paramount

WITH many of the raw materials going into the chemical-consuming industries, market fluctuations are wide and frequent. In such cases the question of price may readily assume in the mind of the buyer an importance out of all proportion to other vital considerations.

This undue emphasis on price may often extend even to those raw materials where market changes are infrequent and small, and where little may be gained by "shopping" for lower quotations. Thus, when the quality and uniformity of the product and the character of the manufacturer should be the prime considerations, price frequently becomes the principal deciding factor. Long-established brand names and records of service may be entirely disregarded for a negligible difference in price.

By rigidly adhering over many years to a uniformly high standard of manufacture, we have built up for our "Eagle Thistle" Brand products an enviable record for quality and uniformity, at the same time establishing a reputation for satisfactory service and equitable business dealings with the consumer. We believe that discriminating buyers are recognizing more than ever before that these are the first things to be considered in selecting a source of supply.

The MATHIESON ALKALI WORKS, *Inc.*

250 PARK AVE., NEW YORK CITY

PHILADELPHIA CHICAGO PROVIDENCE CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda Sesquicarbonate of Soda
Liquid Chlorine-Caustic Soda Bleaching Powder-Soda Ash

Active Paper Demand Continues in Chicago

While Demand Most Largely Is For Coarse Papers, Fine Papers Also Are in Good Request—Coarse Paper Dealers Form Chicago Paper Association With Edgar A. Hull, Jr., of the Pilcher-Hamilton Paper Co. As President—Will Confine Activities to Coarse Papers

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., December 7, 1925.—While coarse papers are the ones which are selling with the greatest rapidity, and for which the demand remains steadily advancing, the fine paper division is progressing with its fall business better in the last two weeks than previously, and the demands seem to indicate that there may be a change in prices within one or two weeks. Some of the fine paper houses have been swamped with orders within the last few days. A firm carrying bonds and writing papers is sold out for two months ahead.

This last week has seen these changes accentuated to the degree that the fine paper market is approaching the business peak which has been reached by the coarse papers. The demand for book papers, which has been so good in the last few weeks, remains the same. Coated papers in general are selling in good shape.

Prices in fine papers remain at about the same levels which have been quoted for last week, with a possible change in a day or two in sulphites and writing papers.

Coarse Papers

The coarse paper market speaks for itself this week. All the fibres and manilas have shifted a quarter of a point during the week, as well as No. 2 Northern Kraft. Business is in such good shape that it has now gone beyond any of the expectations which were held by the believers in the fall business. The fall business in Chicago this year almost became a myth, but when it finally came, after many delays, there were many merchants able to say "I told you so." The demands have suddenly and seemingly for no particular reason become so acute that the companies have been put behind considerably in orders.

Business in boards, which has suffered without being as frequently mentioned in these reports as it should, has been good all fall. Practically all the companies are sold out. Three or four companies report that business has been better this fall than any other year since inflated 1920. Manufacturers and dealers are shipping more tonnage than at any time since that year.

Chicago Paper Association Formed

A new paper association for coarse paper dealers has been formed in Chicago called the Chicago Paper Association, in which seventy-five per cent of the coarse paper dealers of the city are represented. Edgar A. Hull, Jr., of the Pilcher-Hamilton Paper Company is its first president; P. F. Peck of the Hanchett Paper Company is its vice president; J. H. Murnane of the Murnane Paper Company serves as secretary and treasurer; Howard Hollis, of Hollis & Duncan and S. L. Schwarz of the Schwarz Paper Company serve with the officers as directors.

The new organization sponsors co-operation and integrity among the business men it represents and is working for. It functions for the manufacturers and dealers in coarse paper exclusively. One of its steadfast principles is the opposition of price fixing; both asking and giving assurance of integrity and business stability to its members. To mills the new association assures that it will conduct investigations into general merchandiing conditions, which will tend to insure the proper figuring of the cost of business and the general reduction of selling prices. Economics and distribution are two subjects which will not be considered unworthy of study, and the association is well able to make intelligent reports in the coarse paper field along those lines. The membership is composed of some of the oldest as well as some of the newest paper companies in the city and country.

Burhop Paper Co. Prospers

The Burhop Paper company, 28 West Austin avenue, sends the following letter to the trade: "An Open Letter To All Of Our Eight Thousand Customers: Very recently we opened an account for the eight-thousandth customer. We cannot help but pause and reflect as to the progress and completeness of organization that these eight thousand customers have made possible for us. We are mighty proud of the fact that over eight thousand firms have expressed their confidence in the economy and reliability of Burhop's products, by selecting us as their source of supply. Years of constant specializing and concentrating exclusively on wrapping, packing and shipping materials has placed us in a position to develop a very complete line of economical, reliable and efficient materials to meet any wrapping or packing requirement, etc." The letter is closed "Yours for economical efficiency," and signed by Herbert R. Burhop, sales manager, with a printed signature. In the lower left hand corner of the letter is a picture of the Burhop plant, a half tone from a photograph, with the caption, "28000 square feet of floor space devoted exclusively to Burhop's quality wrapping and packing materials."

General News of the Trade

Chicago stationers are contributing largely to the good business of the paper men. Indications are that the stationery business is better this year than it has ever been before in this city.

Printers and allied craftsmen are at last employing idle machines to good purpose, and receiving orders for work where last month there was a scarcity of work for them. This was attributed to the increase in the postal rates, which may or not again have its bad effects on the printers after the Christmas rush. It is hoped that the advertisers and others using printers and printing, will learn methods of using the new postal rates, so that the printers will be busy enough to order paper in normal quantities.

E. R. Jones, of the Kansas City Paper House, Kansas City, visited Chicago this week on his way to New York. The trip was both for business and for pleasure.

The Paper Trade Association is anticipating some meetings during Janua.y, which have been postponed from this month, because of the general dullness which ensues at this time.

Generally, the paper trade in Chicago is in splendid condition, and there is every indication that it will continue to be so for some time. The first of the year is the closest that the paper stock field looks for a change for the better, and there are many merchants in this field who say that it couldn't get any worse. But in fine papers there is hope that the market will even continue to be better until prices jump, as has happened in the coarse papers.

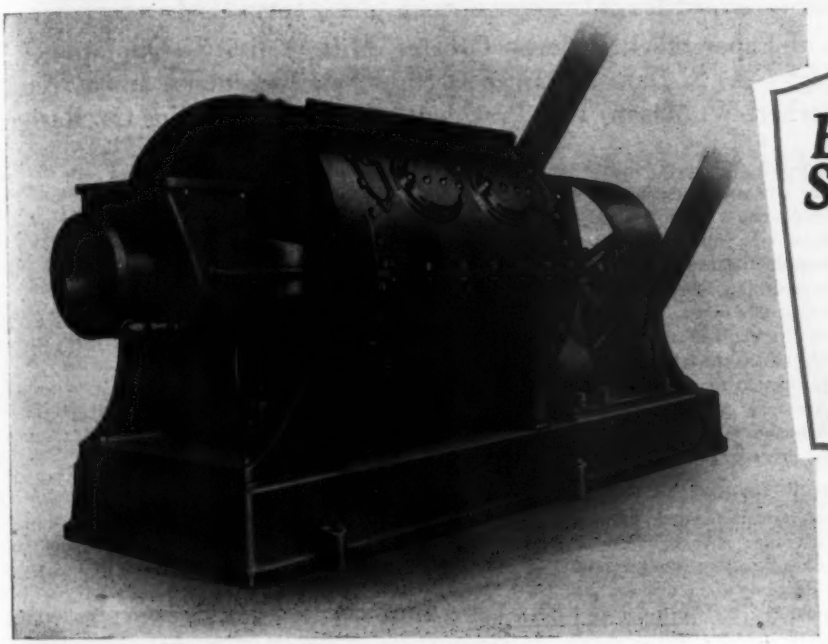
The fall business is turning into winter business, and the dealers do not care which, as long as it's business.

The new year is being anticipated with a good deal of hope and optimism, for the Chicago merchants are looking forward to a bigger and better year in 1926 than has ever been experienced before in normal times. The ideas that general business conditions are once more stabilizing themselves, including paper, means much to the merchants, and if this is indeed true, as the whole country hopes, things look good for the paper trade.

MacSimBar Paper Co. Retiring Bonds

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., December 5, 1925.—The MacSimBar Paper Company has called for payment $200,000 7 per cent first mortgage gold bonds. A premium of 3½ per cent is offered, according to the retirement provisions of the bonds. The order is signed by Charles E. Nelson, president, and S. B. Monroe, treasurer.



Equip your Screen Room with BIRD PULP SCREENS

The saving in power soon pays for the screen

THE Bird Pulp Screen has many advantages including increased power efficiency, saving in floor space, simplification of screen room layout, reduced maintenance expense and extremely high quality of output.

Power efficiency is, perhaps, the outstanding advantage. In most layouts the Bird Pulp Screen will not use more than 1 H. P. per ton of stock.

Figure up your present power consumption including that for circulating pumps (which are eliminated when Bird Pulp Screens are used), and compare it with the power required for Bird Pulp Screens.

You'll find that the saving in power soon pays for Bird Pulp Screens.

The Bird Pulp Screen is as good for pulp as the Bird Screen is for paper

BIRD MACHINE COMPANY
SOUTH WALPOLE, MASSACHUSETTS

BIRD MACHINERY

The Bird Pulp Screen

Philadelphia Paper Mills are Fairly Busy

Demand for Some Grades of Paper Stock Reflects Greater Mill Activity—Quotations Withdrawn on Building Papers—A. S. Datz & Son to Occupy New Warehouse and Executive Offices in January—Herbert W. Mason, Vice President of the Dill & Collins Co. Resigns

PHILADELPHIA, Pa., December 7, 1925.—Local jobbers have been informed by some of the mills that they now are producing stocks for the coming year in order to keep their hands employed and to hold their working forces. They have been offering the local dealers numerous grades of wrappings in advance, stating that they are willing to hold up shipments until after the first of the year, but urging the placement of orders at this time. Most of the local manufacturers in the Manayunk District and the outlying environs are operating at near capacity with enough orders on hand to keep up the present pace of production for the remainder of the month. A few of the mills are busy on belated holiday orders for specialties in wax and greaseproofs and high grade wrappings used by the confectionery and grocery trades.

A Few Grades of Stock in Demand

A few of the grades of paper stocks are in demand, showing that there is slightly more active mill operation. Among some of the wanted stocks just at this time are kraft cuttings, ledgers and over-issue news. The other grades are dragging along in a waiting market, pending more lively mill demands. Prices have been adhering to the quotations of the early fall and very little accumulation is in the warehouses. Rags, like paper stocks, are still holding to the duller markets of the past month, with a few of the grades slightly more active.

Mills Firming on Prices

The present demand for building papers has been held responsible for the withdrawal of all quotations on the building papers manufactured by the Schmidt & Ault Company of York, Pa. There has been intensive building operation in this section throughout the fall as a result of the opening of new subways and the extensive municipal improvements in the way of the construction of the Philadelphia-Camden bridge and the development of new sections in outlying districts in both this city and in Camden and surroundings. This has created an unprecedented demand for all grades of building papers and it is believed that the withdrawal of prices is directly an effect of this activity. Quotations are made only upon request to the York manufacturers.

Another grade of paper that has been subject to price revisions within the past week was tissue of the coarse manilas adapted for wrappings. The Ajax Tissue Mills, of Buck Run, Pa., announced a rise of 3 per cent in their wrapping tissues. There is steadier tone to the toilet tissues, prices holding firmly and demand keeping pace with production.

A. S. Datz & Son To Occupy New Home

With the early days of the New Year the long established firm of A. S. Datz & Son, now temporarily located at 142 North Front street, will occupy its new home under construction on the old site in Marshall street near Ludlow. There is nearing completion the large modern seven story and basement structure which was begun last summer. It is expected that the new home will be ready for occupancy in January, when the warehouses and executive offices will be returned to their former quarters. It is intention of John A Datz, head of the firm, to have a house warming in the new quarters at the time of removal. The Datz Company is one of the oldest box paper distribution concerns in the city. It also carries a large assortment of fine papers for printers' use.

Herbert W. Mason Leaves Dill & Collins

With the withdrawal of Herbert W. Mason from the vice-presidency of the Dill & Collins Company, his duties have been taken over by Secretary Harold B. Collins, son of President Grellet Collins, of the company. The younger Collins has been manager of Woodlands. He will supervise the office management and production, these duties formerly having been the work of the retiring vice-president. With the retirement of Vice-President Mason, there remains on the official staff Vice-President G. N. Collins, who also is general manager. There has been no election to fill the vacancy made by the retiring officer. It was learned that Mr. Mason will shortly become connected with another mill in the state, negotiations now being under way to this effect. Shortly after his retirement from the firm Mr. Mason journeyed to Florida, returning to the city last week.

To Learn of Champion Coated Papers

With the new year the southern printers will be given an opportunity to learn more about the process of manufacture of the coated papers in the Champion Coated Paper Mills through the efforts of the local representative and manager, Charles A. Labor, with offices in the Drexel Building. Manager Labor has just returned to headquarters here after having made the rounds of the South, and supervising the educational campaign among the printing industry in Baltimore held at the Southern Hotel. It was planned to give the moving picture demonstration of paper making which acccompanied the lecture at the Emerson Hotel, but so large was the application from printers in the vicinity to attend that larger quarters were necessary and so the Southern Hotel was selected. Here 160 printers learned of the Champion enterprises and their processes of paper production, with E. Kenneth Hunt occupying the platform. Other lectures on paper making will be given in Richmond and Norfolk in late January or February under Manager Labor.

Thomas S. Casey in Paper Business

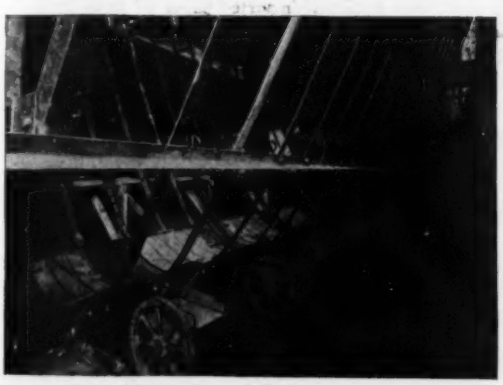
Thomas S. Casey, who has been identified with the Franklin Printing Company, has become an associate of the allied industry as specialist in the distribution of papeteries and printed stationery. Offices have been acquired in the Drexel Building in Room 655, where he will conduct a specialized business in sales of bulk papers of this sort to the hotel trade. Mr. Casey is well known to the paper trade having been purchasing agent for many years for the Franklin Company. In conjunction with the sale of stationery to the hotel trade he will feature special designing of the supplies in this class for advertising purposes.

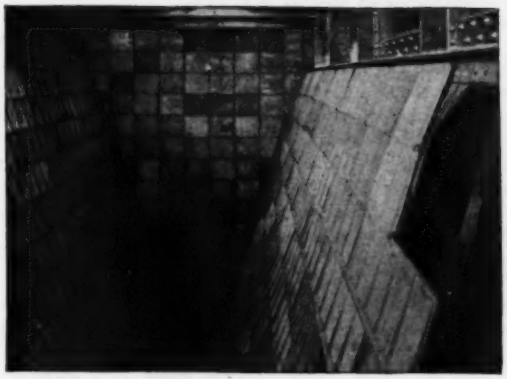
Expansion for the Enterprise Paper Co.

Rapid growth of business necessitated the acquisition ot additional warehousing facilities for the Enterprise Paper Company, Third and Callowhill streets. During the week there was signed a long term lease for the adjoining property on Callowhill street for the storage of paper. The new quarters will supplement the large six story structure which the firm now occupies as executive and sales office and warehouse. It covers an area of 16,000 square feet in a single story structure, and has three entrances on as many highways. It will enable the firm to add materially to its stock of paper, including coarse grades and specialties and bags. The additional warehouse follows other improvements made within the year in which the present home was modernized and reconstructed to meet the needs of the expansion of business and the plans of the officers, President Nathan D. Isen, Treasurer David Back, and Secretary and General Manager A. B. Kehr, for the development of business on a broader scale. Treasurer Back is now

(*Continued on page 30*)

What a newspaper reporter learned about A-S-H Coal Bunkers





The new catenary section bunker, Mr. Yawger said, is the first to be installed in this city and the Rochester Gas & Electric Corporation is the first public utility corporation to use one. It is made of cast iron, Mr. Yawger explained, because that metal, better than any other known, withstands the chemical action of coal. There is a certain amount of sulphur in coal, he said, which will eat into steel or other metals ordinarily used for containers.

The new bunker, now being installed, is made of cast iron plates that overlap each other like shingles so that its sides are semi-flexible and will change with the load inside distributing the stress and strain. It will be sixty feet long, seventeen and a half feet wide at the top and twenty feet deep. It is, in cross section, the shape of half an oval.

11-2-25

A reporter on the Rochester (New York) Democrat and Chronicle sought "real news" about the new Lawn Street Station of the Rochester Gas and Electric Corporation and accordingly obtained an interview with Mr. Thomas Yawger, General Supt. of the company.

The "news" in this clipping from the September 6th, 1925 issue, is the result of the interview, and is, therefore, unbiased,—plainly telling what Mr. Yawger thinks of his A-S-H Coal Bunker.

This Lawn Street Station, located in the heart of Rochester, New York, is the most modern and probably the best example in the country of "what an efficient central heating plant should be." Mr. Rodger D. DeWolf is Engineer of Power Stations for the Rochester Gas and Electric Corporation.

The ALLEN-SHERMAN-HOFF Co.

263 SOUTH 15th. STREET - PHILADELPHIA

Chicago New York Boston Rochester Detroit Kansas City, Mo. Pittsburgh Wilkes-Barre, Pa. St. Louis Indianapolis Atlanta Minneapolis Cincinnati

Paper Mill Activities in the Fox River Valley

D. C. Everest, Sec. and Gen. Mgr. of the Marathon Paper Mills Co. To Represent Paper and Pulp Industry in An Attempt To Establish Experience Ratings on Industrial Accident Insurance—Dr. Navarro de Andrade, of Brazil Visits Forest Products Laboratory

APPLETON, Wis., December 5, 1925.—The United States government has issued a patent to John D. Watson, general manager of the Wisconsin Wire Works, of Appleton, for the invention of a heddle-frame movement device for improving the efficiency of wire weaving machines.

The pneumatic system is in use on the looms of this plant and while this is regarded as a distinct improvement over the oldfashioned hand loom, it was found that the mesh of the paper machine wires produced occasionally tended to be a little rough. The invention is said to remove this defect. It will not be marketed, Mr. Watson says, but will be installed on the Wisconsin Wire Works machines.

To Establish Ratings on Insurance

On the theory that one form of industry is more hazardous than another, an attempt is being made in Wisconsin for establishing experience ratings on industrial accident insurance under the present state workmen's compensation act. Under the act workmen injured in mill accidents can claim compensation for medical expenses and permanent or partial disability. Some manufacturers hold that the insurance premiums which they pay to insure their workmen against accidents are not equitable. A meeting was called in November by the state insurance commission to discuss the matter.

At that time authority to appoint representatives of various industries to study the question was given George F. Kull, formerly of Appleton, who is secretary of the Wisconsin Manufacturers Association. Mr. Kull as chairman of the committee appointed twenty-four representatives of industry. D. C. Everest, secretary and general manager of the Marathon Paper Mills Company, of Rothchild, Wis., was appointed to represent the paper and pulp industry.

The committee will meet once or twice in Milwaukee to consider the procedure for putting in effect in Wisconsin a rating for compensation insurance premiums based upon the accident experiences of employers.

"It is practically certain that experience rating in one form or another will be adopted in Wisconsin," Mr. Kull said. "A permissive law is already on the statute books."

There are some who predict that if the experience ratings are established, paper mills will be paying lower premiums as they are considered to be in the front ranks of safety.

Accident at Hoberg Paper Co. Plant

Two accidents at the Hoberg Paper Company of Green Bay in one day this week placed two workmen, Hubard Zuidmulder and Edward Lemarond, in the hospital. Zuidmulder was loading logs at the plant and was standing on a flat car when three logs, dislodged by his pole, knocked him from the car to the ground, eighteen feet below. He suffered four broken ribs on the left side. Lemarond was attempting to break up a log jam and in falling over a rolling log severaly strained his right leg.

Visits Forest Products Laboratory

Dr. Navarro de Andrade, chief forester for the state of San Paulo, in Brazil, this week visited the United States Forest Products Laboratory at Madison, Wis., to observe pulping trials of a quantity of South American eucalyptus which he had shipped from Brazil for that purpose.

Considerable eucalyptus is grown in Brazil plantation, he said. The trees reach the tie size in about 15 years. It is not certain that eucalyptus will produce paper other than that of "book" grade, although even Brazilian made book paper, because of a tariff on news print, may undersell imported paper of news grade on Brazilian markets.

All of the common chemical processes will be tried in pulping the eucalyptus furnished by Dr. Navarro de Andrade as well as the new chemical processes developed by the Forest Products Laboratory and the mechanical (news print) process.

Kimberly-Clark Hold Safety Meeting

A "safety pep" meeting was held Monday noon, November 23, at the community clubhouse by Kimberly-Clark Company paper mill workers at Kimberly, Wis. E. W. Young, chairman of the safety council, gave a review of the year's accidents, and S. F. Shattuck and M. G. Hoyman also gave talks on safety. Musical entertainment also was provided.

PHILADELPHIA MILLS BUSY

(*Continued from page 28*)

able to be about after confinment to the hospital, where he was taken following an automobile accident which caused an internal injury necessitating his sojourn in the National Stomach Hospital While riding in his auto in the vicinity of 36th and Powellton avenue another car ran into his machine, completely demolishing it and injuring the rider. He was taken to the hospital, where he remained for several days, having been released last week to return to his home. He is now able to be at his desk a few hours a day despite the fact that he lost considerable weight as a result of the accident. William Atherholt, formerly with the H. J. Hogg Company, is now associated with the enterprise Company, taking care of the Wholesale grocery trade. A. C. Hartman, who covers the coal regions, has been fairly successful in his rounds of the section in securing holiday orders for wrappings and other coarse grades, and finds collections better than anticipated in view of the long drawn out coal dispute.

W. C. Hamilton & Sons Move N. Y. Office

Larger quarters have been secured as the Metropolitan headquarters of the W. C. Hamilton & Sons, manufacturers of fine papers with mills located at Miquon, just outside Philadelphia. The New York headquarters have been removed to the Metropolitan Tower Building, 1 Madison avenue, where the offices have been acquired in Room 205. The larger quarters were secured to take care of growing business which has developed under Manager Spencer J. Blake, who for several years has represented the local manufacturers in the Metropolis. The New York headquarters are sales offices exclusively for the line of papers manufactured by the Hamilton Mills and including writings, bonds, ledgers, envelope, tablet, antique book, English finish and other grades.

New York Appraiser Upheld on Wrapping

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 9, 1925.—Word has been received here that the General Board of Appraisers has upheld the decision of the Appraiser at New York, who found that wrapping paper in rolls was not correctly marked with the country of origin. The cases, each containing six rolls, were marked, but there was no marking on the paper or wrapping around the rolls. This was held not to be in accordance with the law and the importer's protest was overruled, and the additional duty of 10 per cent assessed.

KENWOOD

WOOL PRODUCTS

Proven Advantages!

More Continuous Production and Reduction in Operating Costs through the use of

KENWOOD BOTTOMS, TOPS AND PRESSES

Many Mills have found the OPENNESS of Kenwood Board Felt (their ability to remove the maximum amount of water and over a longer period of time, with consequent freedom from trouble) **gives more continuous production and real economies.**

AND IN ADDITION

Kenwood Felts have unusual STRENGTH, LONG LIFE and give SUPERIOR FINISH.

F.C.Huyck & Sons

KENWOOD MILLS, Albany, N. Y.

KENWOOD MILLS LTD.

Arnprior, Ontario, Canada

The Textbook Job Completed

On September 16, 1918, at Buffalo, N. Y., through a meeting of committees of the Technical Association of the Pulp and Paper Industry and the Technical Section of the Canadian Pulp and Paper Association, there was organized the Joint Vocational Education Committee of the Pulp and Paper Industry of North America, for the purpose of creating a set of textbooks which, in the language of the Committee at that time, was to be

> 'So prepared and arranged that each man may take the part of the course during his spare time that will be most helpful to him in the carrying on of his daily work in the mill and which will tell him in simple language the "how and why" of operations which will result in the best quality of production."

On this basis, the Joint International Committee was organized, consisting of George Carruthers and T. L. Crossley representing the Canadian section and George E. Williamson, G. P. Winslow and R. S. Kellogg representing the United States branch of the industry. This committee has remained intact to the present time, with the exception that after a year or two the place of C. P. Winslow was taken by R. S. Hatch. During the entire period, George Carruthers has been Chairman and R. S. Kellogg, Secretary and J. N. Stephenson the Editor of the textbooks.

An Idea But No Money

The committee started with an idea but no money. In addition, therefore, to preparing the material for publication, it had the job of raising all the funds for necessary expenses. An outline of the contents of the proposed textbooks and a suggested program of instruction prepared by the Committee was approved by the Canadian Pulp and Paper Association January 31, 1919, and by the American Paper and Pulp Association February 6, 1919, which became the basis for an appeal to the entire industry for financial and moral support. The response was generous and continuous through five annual assessments by the Canadian Pulp and Paper Association and individual contributions by 200 pulp and paper companies and manufacturers of mill equipment in the United States. Work went steadily forward and February, 1921, saw the publication of Volume I. by the McGraw-Hill Book Company, with Volume II. coming later in the year. Volume III. appeared in April, 1922, Volume IV. in January, 1924, and Volume V., completing the series of five volumes and 2,777 printed pages, came from the press in January, 1925. Altogether at least a hundred men of technical qualifications in the pulp and paper industry contributed to these volumes, either through writing of sections therein or the criticism of the manuscript. More than two hundred and thirty distinct subjects, ranging from simple arithmetical operations through all phases of pulp and paper making down to the details of mill equipment, are treated in simple, elementary language, and the whole series carries a total of 943 illustrations, including nine plates in colors.

Increase in Facilities

Parallel with the publication of the textbooks went the increase in facilities for class and correspondence instruction in the subjects treated by the Institute of Industrial Arts at Gardenvale, P. Q., the Extension Division of the University of Wisconsin, the University Extension Division of Massachusetts and various other institutions, so that already more than a thousand men, working in every capacity in the pulp and paper mills of North America from apprentice and beaterman to superintendent and sales manager, have taken advantage of the opportunity to learn the "how and why" of paper making.

The Joint Committee, having completed this particular phase of the job for which it was created, has had its records audited and submits the following financial statement covering six years of receipts and disbursements:

The Textbook Fund of the Pulp and Paper Industry

Receipts and Disbursements
January 1, 1919—September 30, 1925

Receipts	
Assessments by Canadian Pulp and Paper Association	$26.859.35
Voluntary Contributions by United States Pulp and Paper Mills and their friends	30,17.52
Total	$57,034.87
Disbursements	
Editorial Salaries	31,541.37
Preparation of Papers and Illustrations	16,916.53
Rent	1,905.00
Travelling Expenses	1,329.61
Postage, Stationery and Printing	1,232.99
Exchange	628.53
Textbooks Supplied to Authors	432.13
Office Furniture	235.00
Miscellaneous	323.70
Total	54,544.86
Balance September 30, 1925	
Canadian Pulp and Paper Association	1,234.01
United States Fund	1,256.00
Total	2,490.01
	$57,043.87

The balances remaining in the publication fund will be devoted to the furtherance of vocational education among mill employees in the United States and Canada. Nearly 12,000 volumes of the textbooks upon "The Manufacture of Pulp and Paper," which have received world-wide recognition, have already been sold, and the accruing royalties therefrom, which now exceed $5,000, are going into a separate permanent fund to be held for the necessary revisions and improvements of the books which will be made from time to time to keep them up with the progress of a rapidly growing industry.

Money Well Spent

The committee started with an idea but no money. In addition, sition of having completed its job with money in the bank and it assures the many contributors of time, effort and money to the undertaking that they will never have reason to regret their donations to such a good cause.

United States Contributors to the Joint Vocational Education Fund

Adams Paper Company, Inc., Wells River, Vt.; Albany Felt Company, Albany, N. Y.; Albemarle Paper Manufacturing Company, Richmond, Va.; Allis Chalmers Manufacturing Company, Milwaukee, Wis.; American Writing Paper Company, Holyoke, Mass.; American Wood Board Company, Schuylerville, N. Y.; Appleton Wire Works, Appleton, Wis.; Appleton Woolen Mills, Appleton, Wis.

Bardeen Paper Company, Otsego, Mich.; Bedford Pulp and Paper Company, Richmond, Va.; Beloit Iron Works, Beloit, Wis.; Bemis Bro. Bag Company, Peoria, Ill.; Berkshire Hills Paper Company, Adams, Mass.; Bird Machine Company, South Walpole, Mass.; Bird Machine Company, West Walpole, Mass.; Black-Clawson Company, Hamilton, Ohio.; Bowsher, N. P. Company, South Bend, Ind.; Brown Company, Portland, Me.; L. L. Brown Paper Company, Adams, Mass.; Brownville Board Company, Watertown, N. Y.; Brownville Paper Company, Watertown, N.

Increase the Income On Your Investment

Your paper machines—They are the largest and most expensive units in the mill. They control the mill's output, the quality of your paper and the profits of your business. How to increase the returns from this large investment is a vital problem to every paper manufacturer.

Consider the value of the Voith Inlet on your machines. The Inlet will produce better paper at a lower cost. The improvements in your paper and the savings effected enable you to obtain maximum returns from the paper machines.

Equip your machines with the Voith Inlet and let your product be produced under the proper conditions. The salability of your paper during the coming year will grow larger in comparison to the manufacturer who will be operating under less favorable conditions.

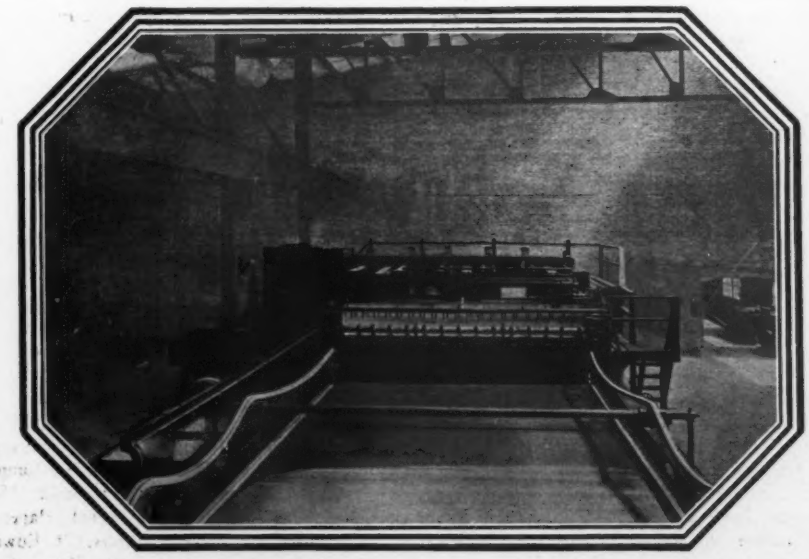
VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Ave.

Don't Stand Idle While Others Are Preparing

115 Voith Inlets have been sold to date. 100 of these machines are now in operation and producing a wide variety of papers, ranging from tissue to bristol. During November many paper manufacturers prepared for better business by ordering a total of 13 Inlets. Give us an opportunity to prove the claims made for the Voith Inlet. Your copy of an illustrated booklet is ready telling of this patented device. Write for it today.



Y.; Bryant Paper Company, Kalamazoo, Mich.; Byron Weston Company, Dalton, Mass.; J. W. Butler Paper Company, Chicago, Ill.

William Cabble Excelsior Wire Manufacturing Company, Brooklyn, N. Y.; Cameron Machine Company, Brooklyn, N. Y.; Carew Manufacturing Company, So. Hadley Falls, Mass.; Case Brothers, So. Manchester, Conn.; Central Paper Company, Muskegon, Mich.; Champion Fibre Company, Canton, N. C.; Chemical Paper Manufacturing Company, Holyoke, Mass.; Cheney Bigelow Wire Works, Springfield, Mass.; Cherry River Paper Company, Scranton, Pa.; Claremont Paper Company, Inc., Claremont, N. H.; Cliff Paper Company, Niagara Falls, N. Y.; Cornell Wood Products Company, Cornell, Wis.; Edwin Crabtree & Sons, Sunapee, N. H.; Crane & Company, Dalton, Mass.; Crocker-McElwain & Company, Holyoke, Mass.; Crown-Willamette Paper Company, San Francisco, Cal.

Defiance Paper Company, Niagara Falls, N. Y.; Detroit Sulphite Pulp and Paper Company, Detroit, Mich.; Dill & Collins Company, Philadelphia, Pa.; District of Columbia Paper Manufacturing Company, Washington, D. C.; R. J. Dowd Knife Works, Beloit, Wis.; DuPont De Nemours, E. I. & Company, Chicago, Ill.

Eastern Manufacturing Company, Bangor, Me.; Eaton Dikeman Company, Lee, Mass.; Eastwood Wire Manufacturing Company, Belleville, N. J.; Eddy Paper Company, Three Rivers, Mich.; Esleeck Manufacturing Company, Turners Falls, Mass.; Everett Pulp and Paper Company, Everett, Wash.

Falls Manufacturing Company, Oconto Falls, Wis.; Falulah Paper Company, Fitchburg, Mass.; Farrel Foundry and Machine Company, Ansonia, Conn.; Federal Paper Board Company, Inc., Bogota, N. J.; Finch, Pruyn & Co., Glenns Falls, N. Y.; Fitchburg Duck Mills, Fitchburg, Mass.; Fitzdale Paper Company, Fitzdale, Vt.; Fletcher Paper Company, Alpena, Mich.; Ft. Orange Paper Company, Castleton, N. Y.

Gilman Paper Company, New York, N. Y.; P. H. Glatfelter Company, Spring Grove, Pa.

Hamersley Manufacturing Company, 23 Park Place, New York; W. C. Hamilton & Son, Inc., Philadelphia, Pa.; Hammermill Paper Company, Erie, Pa.; Hampshire Paper Company, S. Hadley Falls, Mass.; Hanna Paper Corporation, Watertown, N. Y.; Hawley Pulp & Paper Co., Oregon City, Ore.; Holyoke Card and Paper Company, Springfield, Mass.; Humblet Machine Company, Lawerence, Mass.; Hummel & Downing Company, Milwaukee, F. C. Wis.; Huyck Sons, Albany, N. Y.

Inland Empire Paper Company, Millwood, Wash.; International Paper Company, New York City; Itasca Paper Company, Grand Rapids, Minn.

Jaite Company, The, Jaite, Ohio.; D. G. Jenssen Company, 200— 5th Ave., N. Y.; E. D. Jones & Sons Company, Pittsfield, Mass.

Kalamazoo Paper Company, Kalamazoo, Mich.; Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich.; Knowlton Brothers, Inc., Watertown, N. Y.; Knox Woolen Company, Camden, Me.

S. M. Langston Company, Camden, N. J.; Lee Paper Company, Vicksburg, Mich.; Lindsay Wire Weaving Company, Cleveland, Ohio.

Mac-Sim-Bar Paper Company, Otsego, Mich.; Manitowoc Paper Company.; Manitowoc, Wis.; Mathieson Alkali Works, Inc., New York, N. Y.; McDowell Paper Mills, Philadelphia, Pa.; Merrimac Paper Company, Lawrence, Mass.

Manufacturers, Ohio:—

Miami Valley Paper Manufacturers, Ohio: American Writing Paper Company, Franklin; Beckett Paper Company, Hamilton; P. Cary Mfg. Company, Lockland; Champion Coated Paper Company, Hamilton; Crystal Paper Company, Middletown; Fox Paper Company, Lockland; Franklin Board and Paper Company, Franklin; Gardner & Harvey Company, Middletown; Mead Pulp & Paper Company, Dayton; Miami Paper Company, W. Carrolton; Miamisburg Paper Company, Miamisburg; W. B. Oglesby Paper Company, Middletown; Ohio Paper Company, Miamisburg; Patent Vulcanite Roofing Company, Franklin; Peerless Paper Company, Dayton; Richards Paper Company, Lockland; Paul A. Sorg Paper Company, Middletown; Wardlow-Thomas Paper Company, Middletown; Wrenn Paper Company, Middletown.

Millers Falls Paper Company, Millers Falls, Mass.; Minnesota and Ontario Paper Company, International Falls, Minn.; Monroe Bridge Paper Company, Bogota, N. J.; Mt. Tom Sulphite Pulp Company, Mt. Tom, Mass.; Munising Paper Company, Munising, Mich.; Monroe Felt and Paper Company, Lawrence, Mass.

Nash Engineering Company, So. Norwalk, Conn.; National Aniline and Chemical Company, Inc., New York City; National Paper Products Company, San Francisco, Cal.; New Haven Pulp and Board Company, New Haven, Conn.; Newton Falls Paper Company, Newton Falls, New York; New York & Pennslyvania Company, Johnsonburg, Pa.; Niagara Paper Mills, Lockport, N. Y.; Northwest Paper Company, Cloquet, Minn.

Orr Felt and Blanket Company, Piqua, Ohio; Oswego Falls Pulp and Paper Company, Fulton, N. Y.; Oxford Paper Company, New York City.

Papermakers Chemical Company, Easton, Pa.; Parsons Paper Company, Holyoke, Mass.; Pejepscot Paper Company, 42 Broadway, New York; Peninsular Paper Company, Ypsilanti Mich.; B. F. Perkins, Holyoke, Mass.; Pettebone-Cataract Paper Company, Niagara Falls, N. Y.; Pittston Paper Corporation, Pittston, Pa.; Poland Paper Company, New York City; Port Huron Sulphite and Paper Company, Port Huron, Mich.

Rocquette River Paper Company, Potsdam, N. Y.; B. D. Rising Paper Company, Housatonic, Mass.; F. W. Roberts Manufacturing Company, Lockport, N. Y.; J. O. Ross Engineering Company, 30 East 42nd St., New York.

St. Regis Paper Company, Watertown, N. Y.; Sandusky Foundry Company, Sandusky, Ohio; St. Croix Paper Company, Woodland, Me.; Sandy Hill Iron and Brass Company, Hudson Falls, N. Y.; Schmidt & Ault Paper Company, York, Pa.; Schuler & Benninghofen, Hamilton, O.; Sherman Paper Company, Watertown, N. Y.; Skaneateles Paper Company, Skaneateles, N. Y.; Southworth Paper Company, Mittineague, Mass.; Standard Paper Company, Kalamazoo, Mich.; Strathmore Paper Company, Mittineague, Mass.; B. F. Sturtevant Company, Hyde Parke, Boston, Mass.

Texas Gulf Sulphur Company, 41 East 42nd St., New York; Tidewater Paper Mills, Brooklyn, N. Y.; W. S. Tyler Company, Cleveland, Ohio.

Union Bag & Paper Corporation, New York City; Union Screen Plate Company, Fitchburg, Mass.; Union Sulphur Company, New York, N. Y.; United States Rubber Company, Chicago, Ill.

S. D. Warren Company, Boston, Mass.; Watab Paper Company, Sarbell, Minn.; Waterbury Felt Company, Skaneateles Falls, N. Y.;Wausau Paper Mills Company, Brokaw, Wis.; Wausau Sulphite Fibre Company, Mosinee, Wis.; Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa.; West Va. Pulp & Paper Company, New York City; Western Paper Makers Chemical Company, Kalamazoo, Mich.

Wisconsin Manufacturers: Appleton Coated Paper Company, Appleton; Ashland Paper Company, Ashland; Bergstrom Paper Company, Neenah; Chas. S. Boyd Paper Company, Appleton; Combined Locks Paper Company, Combined Locks; Consolidated Water Power and Paper Company, Wisconsin Rapids; Dells Paper and Pulp Company, Eau Claire; Flambeau Paper Company, Park Falls; Fox River Paper Company, Appleton; Gilbert Paper Company, Menasha; Grandfather Falls Company, Merrill; Interlake Pulp and Paper Company, Appleton; Kimberly-Clark Company, Neenah; Lakeside Company, Neenah; Marathon Paper Mills Company, Rothschild; Menasha Printing and Carton Company, Menasha; Neenah Paper Company, Neenah; Nekoosa-Edwards Paper Company, Pt. Edwards; Outagamie Paper Company, Kaukauna; Patten Paper Company, Appleton; Rhinelander Paper

(*Continued on page 39*)

BLEACHED and UNBLEACHED
SULPHITES
KRAFT PULPS
GROUND WOOD

NORRONA
PULP STONES

PERKINS-GOODWIN CO.
33 WEST 42nd STREET
NEW YORK

PAPER

PRINTING PAPER
of
EVERY DESCRIPTION

Paperboard Industries Association Meets

Members of the Paperboard, Container and Folding Box Groups, Paperboard Industries Association, convened in Group Sessions at the Waldorf-Astoria, New York City, November 18. The general meeting of the three Groups, attended by all members, was held on Thursday, November 19.

This was the first meeting since the organization of the Association on September 11. President Fletcher M. Durbin presided at the General meeting, while Vice President Walter P. Paepcke presided at the Paperboard Group Meeting, and Vice President J. P. Brunt at the Container Group Meeting. In the absence of Vice President A. C. Osborn, President Durbin presided at the Folding Box Group Meeting.

The General Meeting was probably the largest gathering of paperboard, container and folding box manufacturers ever assembled at one place.

General Activities for the Coming Year

The Association adopted a program of activities during the coming year more extensive than any heretofore undertaken by these industries. Particular attention is to be given to Research and Sales Promotion. The staff is being enlarged in order to render better service to the users of paperboard, shipping containers and folding boxes, as well as to member manufacturers. Whereas the sales promotion effort has in the past been confined to extending the use of boxboard and corrugated and solid fibre boxes, a special effort is now being made to increase the use of folding boxes, as well.

The following is a brief resume of the subjects discussed and acted upon at the Group Meetings:

Paperboard Group

In opening the meeting, Vice President Paepcke summarized the situation leading up to the formation of the new Association, asking that members cooperate to the fullest extent to make the new organization a success. He pointed out the constructive activities that are being undertaken and urged that each member cooperate wholeheartedly 100 per cent.

He pointed out the need for a set of Standard Mill Specifications, acceptable to both the manufacturer of paperboard and the fabricator. This subject was referred to the Paperboard Group representatives on the general standardization Committee, the idea being that the General Committee can, and will, work out recommended specifications, satisfactory to each group in the Association. Consideration was also given to the following subjects: Simplification of Boxboard Thicknesses; Paperboard Group Statistics; Import Regulations; and All-Kraft Facings.

Container Group

The Container Group elected an Advisory Board, consisting of 12 members, to give general directions to subjects pertinent to that Group. The following is the personnel of the Board elected at the meeting:

J. P. Brunt, Chairman, Mid-West Box Company, Chicago, Ill.; John L. Barchard, Hummel & Downing Company, Milwaukee, Wis.; J. J. Brossard, Fort Wayne Corr. Paper Company, Fort Wayne, Ind.; James B. Fenton, Buffalo Box Factory, Buffalo, N. Y.; Sidney Frohman, Hinde & Dauch Paper Company, Sandusky, Ohio.; C. W. Gaylord, Robert Gaylord, Inc., St. Louis, Mo.; W. S. Goodwillie, Atlas Box Company, Chicago, Ill.; Irving Hill, Lawrence Paper Manufacturing Company, Lawrence, Kansas; F. J. Kress, F. J. Kress Box Company, Pittsburgh, Pa.; Samuel Samuels, American Corr. Paper Products Corporation, New York, N. Y.; S. K. Taylor, Illinois Glass Company, Alton, Ill.; G. H. Wood, River Raisin Paper Company, Monroe, Mich.

Among the subjects discussed at the meeting of this Group were the following: All-Kraft Facings; Over-Runs on Orders; and Uniform Cost System for the Container Industry.

General Manager Browder submitted a special report of "Container" subjects, explaining in detail the action by the Classification Committees in the matter of consideration of special packing regulations, some of which, if favorably acted upon, will increase the use of corrugated and solid fibre boxes.

A special committee was appointed to confer with the Bureau of Explosives and with shippers of Strike-Anywhere Matches with regard to new types of corrugated and solid fibre boxes for the shipment of Matches. Messrs. Sidney Frohman (Chairman), E. R. Hankins, S. K. Taylor, T. S. Estabrook and John Jacobs were named as the Committee.

Folding Box Group

The Folding Box Group, at its special session, Wednesday, November 18, discussed a number of subjects of particular interest, including the following: Standard Mill Specifications; Over-Runs on Orders; Simplification of Box Board Thicknesses; Research Work; Statistical Work; Cost Work; Trade Customs; Code of Ethics and Sales Promotion. As in the case of the other two Groups, the Membership Committee is endeavoring to secure the enrollment of additional members.

General Meeting of The Three Groups

The President called the meeting to order at 10:00 A. M. Following the roll call, which showed the largest attendance of paperboard, container and folding box manufacturers ever assembled at one meeting, the report of the Executive Committee was submitted by President Durbin. This report, which covered a resume of the recommendations of the Executive Committee with respect to the subjects considered, was received with considerable interest; the following motion being passed with respect thereto:

"MOVED, That the report of the Executive Committee be accepted by this body in its entirety, including favorable action on that part of the report with reference to the election of the new members, and

"MOVED, FURTHER, That we express to the Executive Committee our sincere thanks for their laborious and excellent work in our behalf."

Fifteen companies, not members of the former associations (Box Board Association, National Container Association and Folding Box Manufacturers National Association) were duly elected to membership.

The meeting approved the budget of expenditures for the coming year, which contemplates greater activities in the way of sales promotion, as well as in other directions, the idea being that the industry shall be so organized and manned as to render greater service to its members and to their customers than has been possible in the past.

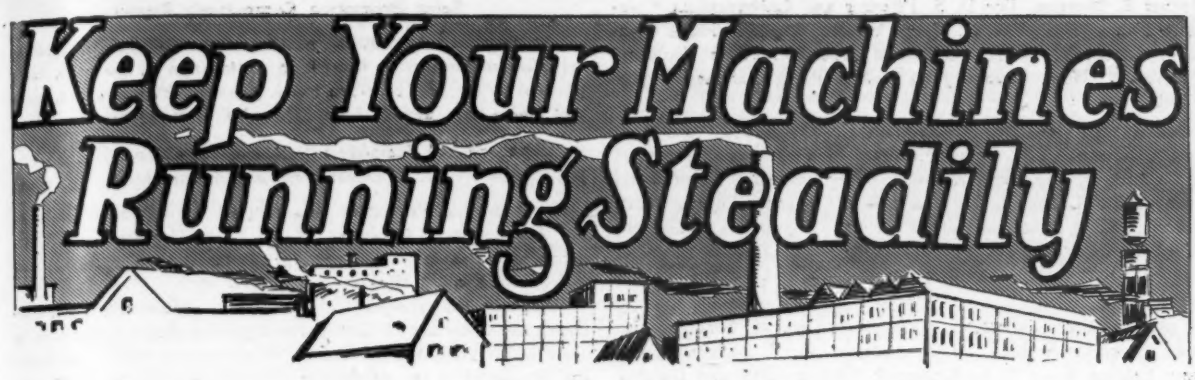
Standing Committees

President Durbin, with the approval of the Executive Committee, announced the appointment of the following as the personnel of the Standing Committees for the ensuing year:

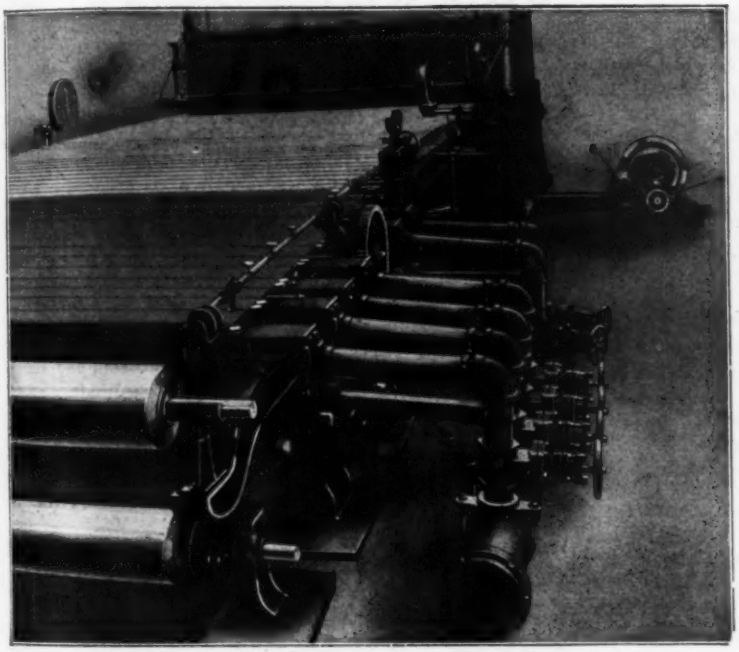
STANDARDIZATION COMMITTEE: Chairman Geo. W. Gair, Robert Gair Company; John L. Barchard, Hummel & Downing Company, Folding Box; Sidney Frohman, The Hinde & Dauch Paper Company, Paperboard; C. W. Gaylord, Robert Gaylord, Inc., Container; W. P. Hicks, Sefton Manufacturing Corporation, Folding Box; C. J. Schoo, General Fibre Box Company, Container; G. H. Wood, River Raisin Paper Company, Paperboard.

RESEARCH COMMITTEE: Chairman F. J. Kress, F. J. Kress Box Company; J. J. Brossard, Ft. Wayne Corrugated Paper Company, Container; J. F. Byrne, Standard Paper Company, Folding Box;

Keep Your Machines Running Steadily



STEADY operation means low-cost operation. Interruptions are costly. Perhaps the greatest contribution of the NEW BELOIT FOURDRINIER is in its dependable, consistent, steady and smooth-running performance. This is a fact proved by the sixteen machines that are and have been dependable income producers for their owners during the past year.



The secret of steady operation lies in modern equipment with its labor and time-saving features—equipment made to uphold today's standards of increased efficiency.

The NEW BELOIT FOURDRINIER with its exclusive and patented adjustable, removable and shakeable features affords you an investment that soon rewards itself in the greater efficiency it brings to your plant.

Let us send you these facts.

The NEW BELOIT FOURDRINIER

Beloit Iron Works **Beloit, Wis., U. S. A.**

Since 1858 Builders of Paper, Board Mill and Container Plant Machinery

Arthur R. Morgan, The U. S. Printing and Lithographing Company, Folding Box; Paul N. Myers, Waldorf Paper Products Company, Container; W. H. Richardson, The Richardson Company, Paperboard; Hugh Strange, John Strange Paper Company, Paperboard.

STATISTICAL COMMITTEE: Chairman E. R. Hankins, Mid-West Box Company; J. B. Fenton, Buffalo Box Factory, Container; R. K. Ramsey, The Hinde & Dauch Paper Company, Paperboard; Irving Randall, Chicago Label and Box Company, Folding Box; Samuel Samuel, American Corr. Pa. Prod. Corporation, Container; H. H. Stonebarger, The Globe Folding Box Company, Folding Box; F. D. Wilson, Alton Box Board & Paper Company, Paperboard.

TRANSPORTATION COMMITTEE: Chairman Geo. M. Seaman, The Eddy Paper Corporation; O. B. Andrews, O. B. Andrews Company, Folding Box; T. S. Estabrook, Chicago Mill and Lumber Company, Paperboard; T. D. Griley, The Fairfield Paper Company, Container; W. H. Sullivan, Bogalusa Paper Company, Inc., Paperboard; S. K. Taylor, Illinois Glass Company, Container; J. D. Zollerbach, National Paper Products Company, Folding Box.

TRADE CUSTOMS AND PRACTICES COMMITTEE: Chairman, H. C. Stevenson, The Rochester Folding Box Company; Henry T. Brown, Brown & Bailey Company, Folding Box; W. S. Goodwillie, The Atlas Box Company, Container; H. S. Hinkle, National Folding Box Company, Paperboard; Fredk. A. Norris, The Thompson & Norris Company, Container; John Omwake, The U. S. Printing and Lithographing Company, Folding Box; G. G. Otto, The Eddy Paper Corporation, Paperboard.

SALES PROMOTION: Chairman J. P. Brunt, Mid-West Box Company; A. M. Billstein, The Lord Baltimore Press, Folding Box; P. C. Brashear, Fort Orange Paper Company, Paperboard; H. C. Campbell, Robert Gair Company, Folding Box; N. H. Carpenter, The Shanandoah Boxboard Corporation, Paperboard; H. D. Cornwall, The Pa Pro Company, Container; Dulaney Logan, The Mongel Company, Container.

J. L. Barchard to Represent Association

The Executive Committee appointed Mr. John L. Barchard, President, Hummel & Downing Company, Milwaukee, Wis., as the official representative of the association to attend the National Distribution Conference, to be held under the auspices of the Chamber of Commerce of the U. S. A., in Washington, D. C., December 15 and 16.

Schedule of Association Meetings

The meeting approved a schedule of meetings for the year 1926. The next meeting will be held in Chicago on January 20 and 21; the following meeting to be held in New York City on March 24 and 25. The complete schedule of Group and General meetings for the year is contained in the Minutes.

Reports of Group Meeting Activities

Reports were submitted by the respective Vice-Presidents giving an outline of subjects discussed at the Group Meetings held on the preceding day. These reports were well received and will be made a feature at future meetings.

Review of Mellon Institute Work

J. J. Brossard, Chairman of the Mellon Institute Committee, of the former National Container Association, submitted an instructive report of the work completed and in progress under the fellowship.

Quotes Remarks of Judge Gary

President Durbin referred to the remarks of Judge Elbert H. Gary, of the United States Steel Corporation, at the recent meeting of American Iron and Steel Institute. He read from Judge Gary's statement, suggesting that if the name of "Paperboard Industries Association" be submitted for "American Iron & Steel Institute" the idea he wished to convey would be apparent.

Sales Promotion Committee's Report

Chairman J. P. Brunt submitted a report of Sales Promotion activities supplementing it with an explanation of the work being pursued by the field representatives. This report was well received and copies have already been forwarded to members.

Approval of Simplified Practice Regulation No. 44, U. S. Department of Commerce

The following Resolution was adopted, giving the approval of the Association to the effort of the U. S. Department of Commerce in the matter of promoting standardization by the elimination of unnecessary thicknesses of board, etc.:

"WHEREAS, prompted by manufacturing interests in this industry the Secretary of Commerce suggested that a Committee be appointed to study the possibilities of eliminating wastes and securing economies in the production of Boxboard and products converted from Boxboard, and

"WHEREAS, a committee was appointed and did devise a plan of Simplification of Boxboard which plan was accepted on July 29, 1925, at a meeting of all interests concerned including the users of these converted products and was thereafter promulgated by the Division of Simplified Practice.

"RESOLVED, that this Association approves of this simplification program and recommends that its members make every reasonable effort to carry it through successfully."

Research Committee's Report

Chairman F. J. Kress reported for the newly appointed Research Committee, which had held a meeting, giving an outline of the research work to be carried on during the coming year.

Economist's Report

Dr. E. O. Merchant, the Association's Economist, gave an interesting exposition on the subject of "General Business Conditions and the Paperboard Industry."

Report of Statistician

Mr. Grafton Whiting, Statistician, gave an explanation of the statistical work of the Association, outlining in detail the charts and summaries showing operations in the paperboard industries.

Association Extends Thanks to President Durbin

Just before adjournment, at the suggestion of Mr. Jerome Kohn, a rising vote of thanks was tendered to President Durbin for the effective and businesslike manner in which he had conducted the meeting.

During recess from 1:00 to 2:00 P. M., a luncheon was served in an adjoining room.

Great Britain Wants Duty on Wrapping

WASHINGTON, D. C., December 9, 1925.—Recommendations that protective duties be granted on wrapping paper are contained in reports just published in London of the Committees established by the British Board of Trade for the investigation of applications from various industries and the imposition of duties on similar products imported into the United Kingdom, according to a report received by the Department of Commerce from Acting Commercial Attache Butler at London.

The report states that it has been recommended that a duty of 17½ per cent ad valorem be granted on packing and wrapping paper and on wrapping paper in manufactured articles whenever the cost of such paper as raw material exceeds 15 per cent of the total cost.

Muskegon Plant Slightly Damaged by Fire

KALAMAZOO, Mich., December 5, 1925.—The plant of the Central Paper Company, Muskegon, suffered a fire loss of $2,500 last Friday. Flames caught in a flue and though confined to a narrow area, the blaze continued for over two hours before finally quelled.

New York Trade Jottings

L. W. Campbell, of the Laurentide Company, Ltd., of Grand Mere, Quebec, was a prominent visitor to New York last week.

* * *

Many prominent members of the paper industry were entertained by the Swedish American Line last Friday at an inspection of their new motor liner *Grepsholm.*

* * *

W. H. Smith, secretary and treasurer of the Abitibi Power and Paper Company, Ltd., of Montreal, accompanied by his wife, spent a few days in New York last week.

* * *

E. C. Comee, of the Pejepscot Paper Company, of Brunswick, Maine, attended the annual meeting of the American Society of Mechanical Engineers, in New York, last week.

* * *

H. O. Keay, manager of the research department of the Laurentide Company, Ltd., of Grand Mere, Quebec, visited many of his friends in the New York paper industry last week.

* * *

George W. McKee, president of the Port Alfred Pulp and Paper Corporation, of Port Alfred, Quebec, spent several days in New York last week. Mr. McKee stated that construction on the new news print mills, at Port Alfred, is proceeding rapidly.

* * *

Herbert E. Smith, General Sales Manager of the United States Rubber Company, of 1790 Broadway, New York, has been elected a Second Vice-President of the company in general charge of sales activities of all commodities except tires, succeeding George H. Mayo, retired.

* * *

The plant of the New Jersey Wax Paper Corporation, of Passaic, N. J., was damaged by fire Saturday. Fortunately, however, the company has been able to resume manufacturing, so that no one depending on it will be inconvenienced, and shipments will be made promptly to customers as specified.

* * *

R. S. Kellogg, secretary of the News Service Bureau, with offices at the Canadian Pacific Building, New York, is attending the second New England Forestry Congress, in Springfield, Mass. December 10 to 12. On Thursday, Mr. Kellogg plans to attend a meeting of the Northeastern Forest Research Council.

* * *

The Reliance Paper and Twine Mills have moved from 27 Great Jones street to new quarters at 1-3-5 Bond street, near Broadway, New York, which is their own building. This building is six stories high and contains two basements—size 80 x 120 ft.—which will give ample quarters for present needs and for future requirements. Max L. Weill is the proprietor of this business.

* * *

The Salesmen's Association of the Paper Industry announces that a member of the association has offered a prize for the best article on the development of better markets for paper in the next ten years. The donor of the prize has left the formulation of conditions to the president and his associates. Plans are now being laid for the formal announcement of this unique, and valuable contest.

* * *

John Walker, of the Gurney Security Paper Company, of Brooklyn, N. Y., announces that he has tendered his resignation of the post of superintendent, to take effect immediately. Mr. Walker has had charge of the manufacture of safety papers for the company since its organization ten years ago. Mr. Walker plans to take a short rest before affiliating himself with one of the leading safety paper manufacturers.

* * *

Lew Glickman, president and treasurer of the De Luxe Paper Company, Inc., of 121 Spring street, was indicted last week by the Federal Grand Jury in connection with the alleged concealment of the corporation's assets, after it became bankrupt last June. Maxwell S. Mattuck, counsel for the National Association of Credit Men, stated that the defendant had continued buying merchandise up to the day of bankruptcy.

* * *

New leases for varying periods, approximating 100,000 square feet of space in its buildings at South Brooklyn, have just been announced by the Bush Terminal Company. The list of tenants signing these contracts includes: Charles E. Denson Company, makers of corrugated boxes for the basement of Building No. 2; Berman and Lesenger, manufacturers of folding boxes, on the eighth floor of Building No. 19; the Eastman Corrugated Container Company, for two sections on separate floors in Building No. 1, and the Gray Envelope Company, for the fifth floor of Building No. 9.

* * *

The eastern sales territory of the newly organized Miami Valley Coated Paper Company, of Franklin, Ohio, will be in charge of A. R. Melker, with offices at 110 East 42nd street, New York. The organization will begin operations in the new year, producing a complete line of coated papers. Heading its sales organization is W. A. Poos, formerly with the Peninsular Paper Company, of Ypsilante, Mich., who will be general sales manager. The production will be in charge of William T. Schenck, formerly for 16 years with the champion Coated Paper Company, who will be the general superintendent.

* * *

Friends of P. T. Dodge, former president, and still later chairman of the board of the International Paper Company, are gratified to learn that he is now well on the road to recovery, resting at Geneva, says the *Wall Street News.* Mr. Dodge had been ill for some time, attributed in part to his arduous duties in connection with the Mergenthaler Linotype Company. After his resignation as chairman of the board of the paper company earlier in the year Mr. Dodge went abroad to supervise the foreign plants of Mergenthaler, located at Berlin and near London. He will probably spend the balance of the year abroad and will not take any active part in business.

Resolutions By Paper Board of Trade

The Paper and Twine Board of Trade through its president, Michael H. Sincoff, has just sent out a notice advising manufacturers of all grades of tissue paper and their mill agents that a resolution has just been unanimously passed by the organization pledging all members not to order, handle or sell any 400 count tissue paper of any grade or color.

The organization also unanimously passed another resolution wherein all the members pledged themselves to give full weight on all twine and all paper and full count on all tissue paper. In addition to this action each of the members of the Paper Board of Trade will be bonded to the amount of $1000 by the National Surety Company, as an evidence of their good faith.

While this association is young it is composed of the right kind of men who are intensely in earnest in their efforts to establish the paper and twine business on a sound and honorable basis.

TEXTBOOK JOB COMPLETED

(*Continued from page 34*)

Co., Rhinelander; Riverside Fibre and Paper Company, Appleton; John Strange Paper Company; Menasha; Thilmany Pulp and Paper Company, Kaukauna; Wausau Sulphate Fibre Company, Mosinee; Geo. A. Whiting Paper Company, Menasha; Whiting Plover Paper Company, Stevens Pt.; Wisconsin River Paper and Pulp Company, Neenah; Wolf River Paper and Fibre Company, Shawano.

Wisconsin Wire Works, Appleton, Wis.; Worthy Paper Company Association, Mittineague, Mass.

York Haven Paper Hill, Philadelphia, Pa.

PAPER TRADE JOURNAL
ESTABLISHED 1872

With Which Is Combined

PAPER
The Magazine of the Paper Industry

HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXI New York, December 10, 1925 No. 24

IMPETUS FOR REFORESTATION

An exhaustive forest survey of forestry legislation by the states during 1925, published by the National Lumber Manufacturers Association, reveals that the nation is earnestly wrestling with the problem of forest perpetuation and reforestation. Twenty-six of the forty-two states which had legislative sessions this year adopted seventy-one important forestry laws. These laws frequently deal with the fundamental problems of taxation and protection against fire.

"The outlook for private reforestation on an extensive scale," says the forest economist of the National Lumber Manufacturers Association, "is becoming most hopeful. This survey shows that the public is beginning to do its part. When the economic position of the forest industries permanently improves reforestation will have a great impetus. Already we have reports that about fifty great commercial forest companies have undertaken systematic reforestation. The public must learn that reforestation and forest utilization go hand in hand. Reforestation will not be helped by disuse of forest products. It is a costly process and must be made to pay its way, if it is to be carried out by private capital."

Perhaps the most radical measure, according to the survey, was that adopted by Michigan, a state now practically denuded of coniferous timber but once the leading lumber producer of them all. The Michigan law taxes commercially reforesting land out of the ordinary land tax group and makes its product subject to a yield TAX WHEN removed. The land itself is subject only to a flat annual tax of five cents an acre on pine and ten cents an acre on hardwood land. To make up for the local loss of taxes whilst new forests are growing the state government is bound to pay five cents an acre into county treasuries for all reforesting land within their boundaries. The yield tax is fixed at 25 per cent of the value of the timber at the time of its removal from the land. Taken together with anti-fire measures the new Michigan law is considered by many foresters as solving the problems of taxing forests without penalizing reforestation and at the same time providing forest communities with necessary current revenues.

The California legislature submitted a constitutional amendment exempting growing trees from taxation. Minnesota is again to vote on a yield tax amendment, Wisconsin adopted a constitutional amendment broadening legislative powers.

Including legislation before 1925, the Lumber Association finds that twenty-three states have enacted laws designed to encourage forestry, as follows: Alabama, Connecticut, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Nebraska, New Hampshire, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Wisconsin, Wyoming.

FOREIGN TRADE OUTLOOK BRIGHT

Reports from abroad are of a more favorable tenor. The results of the Locarno Conference are viewed favorably both here and abroad as a constructive step in the rehabilitation of the political and economic conditions in Europe. With more stable conditions in Europe, states the First National Bank of Boston, there has been less fluctuation in prices and exchange, with a consequent stimulation in trade.

The international trade of the principal countries of the world gained 6 per cent for the fiscal year ending June 30, 1925, while Germany's increase was 28 per cent and Italy's 29 per cent. France also showed considerable improvement by converting an import balance into an export balance; her net favorable balance of trade for the fiscal year was $162,000,000. In spite of the serious industrial condition of Great Britain, her proportion of world trade is estimated at 19 per cent, as compared with 16 per cent in 1913.

Recuperation from war devastation in Europe has been quite rapid as a result of international credits and the adoption of more modern equipment and improved methods in manufacture and marketing. In fact, industries in some of the European countries are in a better position to compete than ever before.

Not only are the European countries recovering industrially, but in the face of enormous financial obstacles are determined to meet their obligations. During the past month Esthonia and Italy have arranged for the funding of their debt to the United States. In both cases payments are to extend over a period of sixty-two years. The Roumanian Debt Commission is now here to enter negotiations for the funding of its debt, which totals $46,000,000.

Imports of merchandise for the nine months ending September were over $3,000,000, an increase of 15 per cent over a year ago, while exports for the same period gained 12½ per cent. The net favorable balance of $357,000,000 was the highest since January of this year.

ADVERTISING IN MARKETING

Advertising is given a definite place in the economy of marketing, or distribution, by the Committee on Market Analysis, Advertising and Advertising Mediums of the National Distribution Conference. The full report of the committee will be made at the meeting of the Distribution Conference to be held in Washington next month under the auspices of the Chamber of Commerce of the United States.

Although the Committee concludes that there is a large element of waste in advertising, due to lack of information or misjudgment of market conditions, it finds it to be an important economic factor in the reduction of distribution costs, resulting in advantages both to producer and consumer.

"Broadly speaking," the committee says in its survey, "it would seem that where the advertising creates an increased demand for products of a certain class, a wider distribution of such products,—in other words, makes new business, bringing about lessened distribution costs and lessened production costs, owing to increased demands—there can be no doubt as to the value of such advertising, not merely to the concerns that pay for it but also to the public that consumes the goods.

"From the data available, it is hardly possible to make a non-disputative demonstration. Nevertheless, we believe that it can safely be said that the use of effective advertising by national distributors as a general rule produces one or more of the following results:

"1. Decreases the cost of selling.

"2. Lowers the cost of production on account of increased volume.

"3. Lowers prices to the consumer and thereby raises the standard of living.

"4. As a by-product, aids in the education of the general public.

"Data have been obtained from a number of national advertisers to show the effects advertising has had upon the cost of production and the cost of selling, and prices to the consumer. It is realized that changes in business conditions during the past few years and changes in distribution policies within the individual companies make it very difficult to eliminate the variable factors and to prove the effects of advertising. The data which have been collected, however, seemed to indicate conclusively that the first three results named above are brought about by advertising.

"In addition to the four results obtained by advertising which have been mentioned above, advertising often has the following beneficial effects for the manufacturer, dealer, or consumer.

"1. Advertising aids in stabilizing production.

"2. Advertising aids in standardization and quality.

"3. Advertising aids in the simplification of products. (Elimination of unnecessary items in the line.)

"4. Advertising helps to prevent fluctuation in prices."

Hinde & Dauch To Build Mill in Ontario

[FROM OUR REGULAR CORRESPONDENT]

SANDUSKY, Ohio, December 1, 1925.—A sixth mill is to be added to the Hinde & Dauch Paper Company's plants, President Frohman announced following a recent meeting of the company. The new mill will be built at Trenton, Ont., and construction will begin soon. It will be a large unit of the company and will have a capacity of 100,000 pounds of paper a day. This will make the total strawboard output of the local company's plants 460,000 pounds daily.

The plant will be finished late in 1926. Trenton is a city of 6,000 on an estuary of Lake Ontario. O. H. Moore, Canadian manager, was present at the meeting and discussed the project.

Manitowoc Engineering Works Ships Diffusers

[FROM OUR REGULAR CORRESPONDENT]

MANTIOWOC, Wis., December 1, 1925.—The Mantiowoc Engineering Works has just completed shipment of six diffuser tanks 11 feet by 18 feet 3 inches, to the Calcasieu Sulphite Paper Company at Elizabeth, La., to be followed shortly by shipment of one incinerator and even water jacketed blow pipes.

This is some of the equipment furnished by Manitowoc Engineering Works, and will be used in making improvements by the Calcasieu Sulphite Paper Company.

Canadian Paper Exports Increase

Exports of pulp and paper from Canada in October were valued at $13,943,763, according to the report issued by the Canadian Pulp and Paper Association. This was an increase of $257,757 over the previous month and of $2,294,977 over the total for October, 1924.

Wood pulp exports in October were valued at $4,526,474, as compared with $3,696,406 in October, 1924, while exports of paper amounted to $9,417,289, compared with $7,952,380 in the corresponding month last year.

Details for the month are given below:

	October 1925		October 1924	
	Tons	Dollars	Tons	Dollars
Pulp—				
Mechanical	49,902	$1,445,060	32,773	$1,002,362
Sulphite Bleached	17,031	1,280,194	13,818	1,017,399
Sulphite Unbleached	19,670	1,041,939	17,841	911,961
Sulphate	12,608	759,281	11,974	764,684
	99,211	4,526,474	76,406	3,696,406
Paper—				
Newsprint	124,529	8,773,538	99,812	7,307,539
Wrapping	1,374	182,865	1,217	186,322
Book (cwts.)	4,463	42,646	2,525	20,751
Writing (cwts.)	562	4,886	2,971	27,854
All Other	.....	413,354	.....	409,914
		9,417,289		7,952,380

For the first ten months of the current year, exports of pulp and paper were valued at $125,463,628, which is an appreciable increase over the total of $114,699,119 for the first ten months of 1924. In this period the exports of wood pulp increased from $32,476,443 in 1924 to $38,708,391 in 1925, while paper exports rose from $82,222,676 to $86,755,237.

Following are the details for the first ten months of the year:

	10 Months 1925		10 Months 1924	
	Tons	Dollars	Tons	Dollars
Pulp—				
Mechanical	277,667	$8,146,495	188,571	$5,994,310
Sulphate	123,100	7,525,231	119,151	7,058,030
Sulphite Bleached	155,196	11,631,072	136,746	10,235,466
Sulphite Unbleached	212,451	11,405,593	175,786	9,188,637
	768,414	38,608,391	620,254	32,476,443
Paper—				
News print	1,142,029	80,487,010	1,006,559	75,310,579
Wrapping	17,102	2,318,828	18,217	2,712,150
Book (cwts.)	35,131	328,955	18,871	151,291
Writing (cwts.)	8,796	74,773	15,810	166,204
Paperboard	.....	2,633,543	.....	2,867,708
All Other	.....	912,128	.....	1,014,744
		86,755,237		82,222,676

Considerable gains were made this year in the exports of wood pulp particularly in mechanical and sulphite pulps. The increased exports of news print are a reflection of the larger output noted from month to month, and which this year has passed all previous records.

Exports of pulpwood in October were valued at $1,066,595, a slight decline from the figures for October, 1924. During the first ten months of the year the quantity of pulpwood exported amounted to 1,290,120 cords, valued at $12,842,564, while in the corresponding months of 1924, exports were 1,196,376 cords, valued at $12,253,171.

Favorable Prospects for Paper Mills

KALAMAZOO, Mich., December 6, 1925.—Business with the paper mills ought to be good for the next two years at least," remarked Alex V. Macvie, who handles paper mill supplies and covers a wide range of territory throughout the central western states. He has just returned from a series of trips that have covered mills from the Wisconsin and Minnesota districts to as far east as Buffalo and south to the Miami valley in Ohio.

"Mills everywhere are running on a high production basis," said Mr. Macvie. "The demand is good and wages and employment are at a high level for that industry. Executives generally are optimistic."

Mr. Macvie stated that, according to his observations, he believed the industry in this valley is on a high level, comparing favorably with the output in any section. He is of the opinion that the high average of production will continue for two years at least, possibly longer.

SYMBOL of QUALITY
KALBFLEISCH
CHEMICALS
FOR NEARLY A CENTURY

Chemicals for Paper Mills

CASEIN

IMPORTED • DOMESTIC

ALL
Grades - Grindings
MAXIMUM
Strength Solubility Cleanliness

THE KALBFLEISCH CORPORATION

200 FIFTH AVENUE, NEW YORK, N. Y.

FACTORIES—Erie, Pa. Kalamazoo, Mich. Chattanooga, Tenn. Waterbury, Conn. Elizabeth, N. J. Brooklyn, N. Y.

Does the Saving of $1,000 to $10,000 a Month Interest You?

The following letter from Mr. R. H. Stevens, of the Bogalusa Paper Company, will show you how this can be done:

Our new illustrated catalog sent free on request

"I feel that I ought to thank you for the service you have done to the paper mill chemist in putting in his hands a handy tool such as your Comparator Set has already proved itself to be.

"With the aid of this instrument I have already found several leaks in our operations where we have been losing more material than we would ever have realized without this test. We are placing our beater room under pH control and thereby saving the original cost of the outfit every day in reduced alum consumption alone. And in addition we are getting a better and more uniform product.

"I am asking our purchasing department to order another set so that I can have one in the laboratory and another in the mill. Also I am arranging to specify some of our raw materials on a pH basis."

LAMOTTE CHEMICAL PRODUCTS COMPANY

McCormick Building, Baltimore, Maryland, U. S. A.

Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G.MacNAUGHTON, Secretary

Beating

By W. G. MacNaughton

In North America beating is generally understood to mean the mechanical treatment of the stock in preparation for the paper machine.

According to old practice, all or most of this treatment was given in the hollander regardless of the fiber used or the grade of paper being made. Considerable emphasis was placed on certain of the factors, having in mind the nature of the fiber constituents and the particular characteristic desired in the finished product. A number of the factors were: the size of the tub and the quantity of stock treated; the weight of the roll; the composition, design and condition of the roll bars and bedplates; the manipulation of the roll in relation to the bedplate; the density of the stock and the time of beating.

The refiner was reserved for the final treatment only, whereby the beaten stock was cleared of lumps and sometimes the fibers reduced in length.

Little was definitely known of the way to vary these different factors and it was the custom to shroud the beating operation in mystery. The expert beater engineer was regarded as a true artist, his control procedure consisting of delicately feeling the bedplate with a wooden rod held in his teeth and testing the feel of the stock with his hand until he gave the signal to drop the charge. He took some of the stock when it had passed the refiners and after diluting, poured it from one dish to another, carefully examining the appearance of the fibers.

Wood Pulp

With the increasing use of wood pulp in making paper of all grades,—newsprint, books, writing, wrapping and tissue as well as paper board—it has gradually become recognized that the beater is a relic of a past papermaking age when textile fibers were the only ones used for paper. In really modern plants the machine that may have the outward appearance of the beater is used for defibering or mixing the pulp with the other papermaking materials. The real beating or mechanical treatment is given by a machine that looks externally like a jordan but which internally may be very different from those originally used.

For the treatment of rags it is still the general practice to use beaters in the original way, although in one of the large mills making an excellent writing paper from rags, the mechanical treatment was for a considerable period placed on a jordan with a filling of special construction.

At present time, as has been indicated, there are paper mills on all grades of high quality where the jordan in some form supplies practically all the mechanical treatment that the stock receives.

Fine Papers

This grade has already been referred to and as indicated it is probable that at the present time in most mills making it the beater performs its old function. The flybars and bedplate are of bronze and the rate at which the beating progresses is carefully controlled, usually by the ammeter reading of the motor driving the roll. The refiner is then used to clear the stock.

Greaseproof

For this grade the progression was first from beater rolls with metal flybars to those of lava stone in order that the time of beating might be materially shortened. Although this is still the type of equipment largely used, in the most modern greaseproof mills practically all the work is done in jordans with fillings of special design and driven by motors of high power. It is usual also to apply several jordans in parallel to each paper machine.

Wrapping Paper

In the different grades of this class of papers the progression as to equipment followed a similar course as greaseproof, although the extensive use of the jordan came at an earlier date.

For kraft paper the older practice was to use edgerunners in conjunction with beaters equipped with lava stone rolls and bedplates, and to use no refiner. At the present time, however, the reverse of this is true. The beaters are used only for defibering and mixing the pulp and nearly the entire mechanical treatment is given in jordans which are usually of special design and operated in parallel.

Book Paper

In this grade, composed of bleached sulphite and soda pulps or deinked paper stock, the beaters where used are mixers only where the fillers, chemicals and color are added. What little mechanical treatment the stock receives is given in jordans either in parallel or tandem.

Newsprint

In this grade we find the ultimate step in mechanical treatment since in the most modern news print mills neither beaters nor jordans are used. By careful control of the manufacturing processes the mechanical pulp and the sulphite after being mixed go as paper stock to the paper machines. The only use made of beaters and jordans is for the defibering of the broken paper.

Board

In board manufacture, so called "continuous beaters" are very

largely used to defiber the paper stock. These, however, are not beaters in the true sense and as in other grades the mechanical treatment is given in jordans.

Beaters

The original beater consisted of a trough in which the cotton or linen rags were placed and a series of metal faced hammers which were raised by rotating cams. When released the hammers were allowed to drop on the rags, gradually reducing them to fiber. This operation was beating. The hollander was invented about 1700 A. D. in its present form and consisted of the tub with a roll which served both to circulate the pulp and through contact with a bedplate to give the fiber mechanical treatment. With the invention of the paper machine and its development in recent years especially as to speed of operation, the need was recognized of equipment whereby there might be continuous preparation of the pulp instead of the intermittent treatment necessary where hollanders are used.

With the increasing use of wood pulp for special grades of strong paper and the desire for reducing the time of treatment as well as the equipment required, many modifications have been made in the design of the hollander without altering its general principles. One of the chief points aimed at was to develop a hollander whereby stock of as high a density as possible could be treated. To accomplish this either mechanical circulating equipment was applied or the tub design was modified so that the circulation was assisted by taking advantage of the action of gravity. As a result practically all the builders of beating equipment now furnish hollanders of the rapid circulation, high density type, and where beaters are used many of them are of this design.

At the same time the tubs have been greatly increased in size and rolls of corresponding dimensions and weight have been employed. Also the filling of the rolls and bedplates is of many different designs as well as of different materials, which are believed to secure the particular effects desired either in fiber treatment or in a reduction of power consumed per ton of product.

Generally speaking, where shortening of the fiber is the aim, without hydration, the bars of the beater roll and bedplate are of relatively thin metal and are kept sharp. Where hydration of the fiber is desired the bars are much thicker and frequently of stone so that a milling rather than a cutting action results.

As already indicated, however, all the grades of paper where such special equipment was long believed necessary are now prepared in some type of jordan.

Jordans

When first developed, probably about 1870, the jordan was used as a refiner only and replaced another machine of a similar type—the Marshall—which is still used to some extent.

As a refiner the bars of both the shell and plug are usually of steel and relatively thin. In using the jordan for mechanical treatment the chief modification has been in the thickness of the bars and the material of which they are made. In some the bars are of carborundum or stone, while in others they may be of bronze or cast iron but of a design to ensure a milling action on the fibre treated.

By the use of density regulators on the stock suspension delivered to the jordan and with tests for slowness on the discharge as well as the power reading of the motor driving the jordan a uniform degree of treatment can be secured. In some plants several jordans are used for each machine and they may be applied either in parallel or tandem, according to the degree of treatment wanted.

Refiners

Even with the increasing tendency to use a machine of the jordan design for the chief mechanical treatment there is doubtless a need being recognized for equipment for the final refining of the stock. This is seen in the development of machines of the general type of a colloid mill.

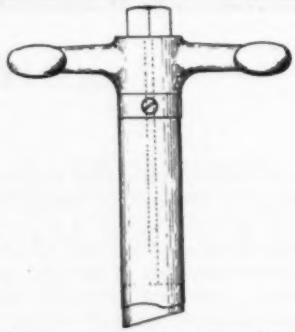
While as yet they have not had wide application the advantage of their use in special cases may be recognized.

With the development of paper manufacture towards machines of greater speed, the need has been increasingly recognized for stock of uniform condition.

To secure this uniformity of condition, especially in mills of large and continuous production of a single grade of paper, the mechanical treatment has gradually tended towards a continuous process instead of the batch method so long used.

New Pulp Sampling Tool

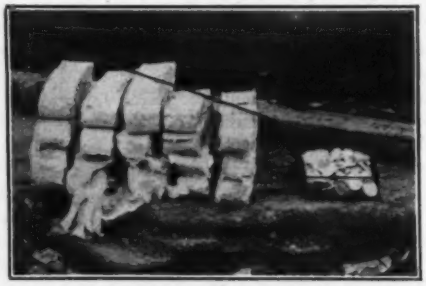
The Thompson Manufacturing Company, of Lancaster, N. H., announces that it is now putting on the market the Crossley pulp sampling tool. This tool was devised to obtain results on large numbers of unit packages in less time than the customary methods,



CROSSLEY PULP SAMPLING TOOL

especially on wet laps. It has been used for some years with all forms of pulp, both wet and dry, and has also been used for sampling baled rags and paper stock.

The accompanying illustrations show the tool and comparison with strip sample of wet laps. The two samples, which gave practically identical results, are shown. Strips (left, in cut) three inches wide, cut across sixteen wet laps, took forty-five minutes to cut, weighed 7,000 grams, and required thirty-six



SAMPLES CUT WITH NEW TOOL

hours to dry. Cores (right) cut with the Crossley tool took eight minutes to cut, weighed 600 grams and required only ten hours to dry.

For sampling rags and old papers in bales, a longer cutting part is used. This can be attached very quickly in place of the shorter blade.

Mattagami Pulp Co. In New Office

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., December 1, 1925.—The Mattagami Pulp and Paper Company, Ltd., announces the removal of its head office on November 30 to Room 808, Northern Ontario Building, 330 Bay street.

The Armstrong Drainage System

By A. E. Armstrong, Armstrong Machine Works, Three Rivers, Mich.

There are three important points to be considered in the drying of paper. First, the wet felts and press rolls which should be made to eliminate as much water as possible before the sheet is passed over the driers. Second, the heating and ventilation of the machine room which has to do with the carrying away of the vapor after it has been evaporated from the paper. Third, the drainage of the driers and the control of the drier temperature. Each of these things should be considered as an entirely separate engineering problem. This paper will deal only with the subject of drainage.

The condition of both the inside and outside surfaces of the drier has an effect upon the heat transference. It is, therefore, advisable to keep these surfaces as clean as is practical. It is hard to secure reliable records of the outside temperature of the drier although this is the surface that directly transmits the heat to the paper. It is fair, however, to assume that, other things being equal, this temperature varies directly with the inside temperature of the drier an accurate reading of which it is very easy to secure and which is always equal to the temperature given in the table of the properties of saturated steam for the exact steam pressure in the drier.

It does not follow, however, that the steam pressure is always equal to that shown on a gage, even though the gage be accurate, because the gage pressure is equal to the sum of the steam plus any air pressure that may be in the drier.

Economical drainage of the drier means constant removal of any accumulating air and condensate without the removal of steam, thus keeping the drier at the maximum temperature corresponding to the steam pressure carried. When in this condition, the temperature of the drier may be readily controlled as it responds very quickly to a slight raising or lowering of the steam pressure.

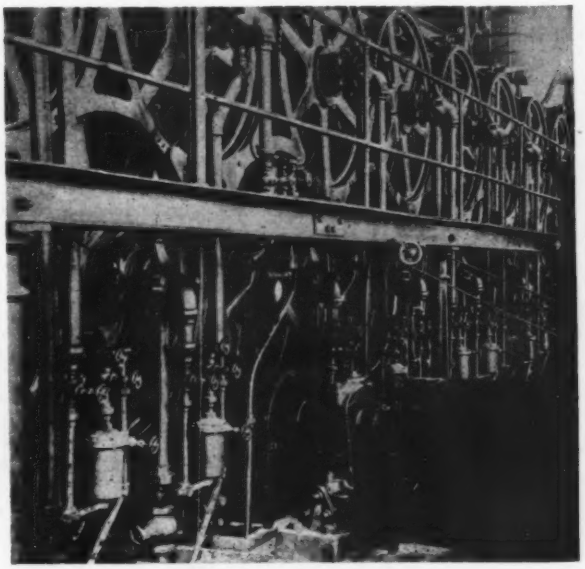
In the consideration of a "drainage system" it is necessary to include the complete lay-out of separators, traps, pumps, valves, piping, etc., from the steam supply to the disposal of the condensate. If this is not done, a system which is theoretically very fine in some points may fall down badly at some other point. For instance, if a steam-driven vacuum pump be included in the system it would be considered good engineering to exhaust this pump to the driers in order to utilize the heat from the exhaust steam. If, however, this were done without the introduction of a good oil separator between the pump and the driers to remove cylinder oil, considerable trouble might be experienced in the boiler room due to oil in the feed water.

In the Armstrong drainage system, all exhaust from reciprocating engines is first passed through a good oil separator so that reasonably clean steam is delivered to the driers. Each paper drier and felt drier is equipped with a separate steam trap of the inverted, submerged bucket type. Considerable quantities of dirt, air and condensate are readily passed through such traps but they do not allow the escape of steam.

There is a steam supply to each drier from a main steam header and one main drip header to receive the discharge from the traps. This drip header is inclined toward the wet end of the machine sufficiently to give a good gravity drainage in that direction and is drained from the low point at the wet end through a large steam trap of the inverted, submerged bucket type. From one to four driers at the wet end of the machine are also equipped with a steam supply line from the main drip header as well as from the main steam header. These two lines are each provided with a valve and come together forming one line outside the drier. With this arrangement it is possible to feed any of these driers either from the main steam line or from the flash steam in the drip header.

In order to control the temperature of these first driers a suitable valve is installed between the steam supply and drip header so that any uniform pressure from several pounds gage down to a few inches of vacuum may be readily maintained in the drip header. The driers fed from the drip header are "cooler first driers" and traps from these first few wet end driers discharge into a short secondary drip header, also the large trap draining the main drip header discharges to this secondary header which leads directly to the receiving tank of a rotary vacuum pump.

This pump is composed of two parts mounted on the same shaft and directly connected to a motor. One part of this pump is a rotary vacuum pump capable of handling considerable quantities of air. The inlet to this part of the pump is from the upper part of the receiving tank. The other member mounted on the same shaft is a simple centrifugal water pump which is fed from the bottom of the receiving tank and which discharges the water back to the boiler room.



Machine Equipped With Armstrong Traps

The individual trapping of the ordinary heating coils, etc. has long been considered the best engineering practice. The individual trapping of papermachine driers is also theoretically correct, but the problem is much more difficult owing to the great quantity of air to be handled, and to the fact that (in case of the driers being equipped with siphons) there is not a gravity flow from the drier to the trap. This, together with the fact that in many cases where individual traps were tried no oil separator was used to prevent an excessive quantity of grease and dirt from entering the driers, has given the idea of the individual traps on papermachine driers a black eye.

It is true there are quit a number of installations of individual traps that have been on for years giving very satisfactory service. It is also true that a great many individual traps have been overtaxed in their capacity for water, air, and dirt, and because of the continued attention required or because they had to be finally discarded, the idea of individual traps had become very unpopular in the industry.

However, it has been repeatedly proven that with the proper

equipment and the proper arrangement of installation, this system of drainage is highly efficient, requiring a minimum of attention and providing a means of very ready control over the drying.

The inverted, submerged bucket trap used in the Armstrong drainage system is entirely different in principle from any other steam trap on the market. It is composed of a cylindrical cast iron body and cover, the body being trapped in the center of the bottom to receive the inlet pipe to the trap and the cover being tapped to receive the discharge pipe. Within the trap, the valve frame is screwed into the cover and the valve is controlled by a system of levers which are operated by a bucket inverted over the inlet of the trap, and which when the trap is in operation is at all times entirely submerged in water. This bucket is made of brass tubing, the top of which is closed with a brass cap attached by means of a pivot to the levers which operate the valve. The bottom of the bucket is fitted with a cast iron ring of the proper weight so that the bucket as a whole will float when filled with steam or air and sink when filled with water.

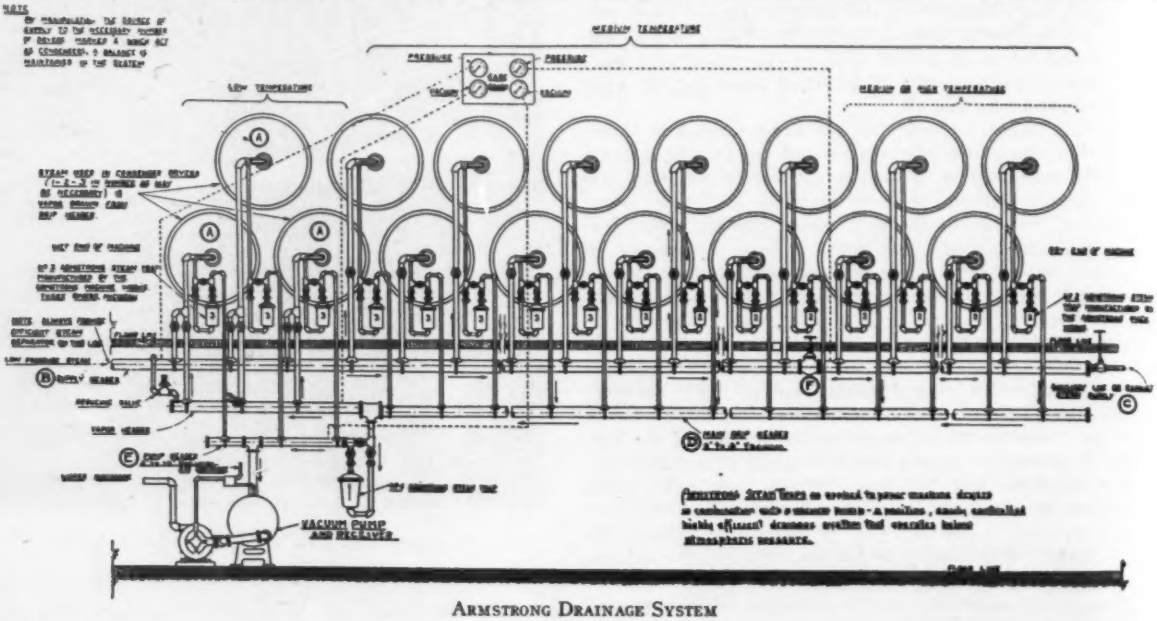
There is an air vent in the cap of the bucket through which all air is allowed to escape into the upper part of the trap where it will be discharged with the condensate through the regular valve. Any steam which passes through this vent is condensed in the water above the bucket so that there is no loss of steam through the trap. There is no place for sediment to accumulate in this type of trap, as all water enters at the center of the bottom of the trap and must pass under the bucket, giving it a self-scrubbing feature that will keep the trap clean from any ordinary quantity of sediment which may come to it.

This trap can only be kept closed by a continual supply of dry steam, and as this steam is always being condensed there is automatically maintained a constant differential in pressure between the drier and the trap. This difference is just sufficient to cause a constant flow from the drier to the trap but does not allow the steam to pass beyond the trap to the discharge. Steam pressure in the driers may be varied at pleasure without in any way disturbing the balance or interfering with the drainage of the driers.

In repeated tests on many different driers, it has been proven with a thermometer that these traps will maintain the highest possible temperature corresponding to the saturated steam pressure in the drier, and that higher velocities in the discharge not only blow through great quantities of steam which must either be wasted or used in some other way than drying paper, but actually cause a lowering of pressure and consequently of temperature within the drier for the same initial pressure in the steam header.

In the Armstrong drainage system, there is always maintained a constant differential in pressure so that there is no possibility of back pressure preventing the perfect drainage of any drier, and the attention and upkeep of the system when properly installed is almost nothing.

In operating the Armstrong drainage system, the vacuum pump is started first and most of the air is removed from the driers. With the machine in motion, steam is fed from one main headed to all driers but the desired number of cooler first driers at the wet end of the machine. If it is desired to have three or more sections of different pressure along the machine this can be done by the use of separate steam headers without in any way interfering with the effectiveness of the drainage system. A differential of at least several pounds pressure is always maintained between the steam supply and drip header and a portion of the water discharged to this drip header will be reevaporated by the heat which it contains and this "flash" or regenerated steam with the required amount of steam through the control valve is used in the cooler first driers. Because of the low temperature at which steam is condensed in the first driers, it is possible to maintain sufficient differential in pressure to secure perfect drainage without the use of any makeup water in the vacuum pump.



ARMSTRONG DRAINAGE SYSTEM

The advantage of perfectly drained driers in regard to quality of paper and speed at which the sheet may be run is well known in the industry. On certain grades of paper, the cooler first driers which cause the paper to become thoroughly warmed through before rapid evaporation is started from the surface are also of great advantage, but perhaps the principle advantage of this drainage system is the perfect control which it gives over the drying of the sheet. When the paper begins to come slightly above or below the required moisture content, the condition is remedied not by any change in the press rolls nor in the ventilation of the machine room, but by slight changes in steam pressure which in perfectly drained driers quickly gives a corresponding change in temperature.

Driers perfectly drained maintain a uniform temperature so that hand control of the drying is not so frequently necessary, resulting in a more uniformly dried sheet and, therefore, one in which the moisture content may be held closer to the maximum allowable.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

CLARENCE J. WEST, CHAIRMAN

Paper Specialties

Strong Paperboard. Karl Franck. Ger. pat. 408,216; addition to 400,451. Papierfabr. 23, 257 (Apr. 12, 1925). Paperboard, with the hardness of wood, is produced by adding to the wet sheets, or to the stock, an emulsion of glue or similar substances and anhydrous gypsum.—J. L. P.

Manufacture of Roofing Paper. Rabbow Willink & Co. Ger. pat. 408,151. Papierfabr. 23, 201 (Mar. 22, 1925). A roofing paper is produced by uniting two or more absorbent layers of different fibrous composition. It is then soaked in oils, fats, waxes, resins, bitumens, etc.—J. L. P.

Waterproofing of Vulcanized Fiber. Ernst Fues. Ger. pat. 409,822. Papierfabr. 23, 201 (Mar. 22, 1925). Vulcanized fiber is subjected to the action of formaldehyde and acidic substances at an elevated temperature (80 to 100° C.).—J. L. P.

Process and Machine for Manufacture of Fancy Paper. Papierfabrik Koslin. Ger. pat. 409,223. Papierfabr. 23, 147 (Mar. 1, 1925). The process for manufacturing fancy paper consists essentially in producing several colored sheets on cylinder machines and subsequently uniting them to a composite sheet.—J. L. P.

Production of Especially Strong Cardboard. F. W. Pilling. Ger. pat. 408,391. Zellstoff U. Papier 5, 54 (Feb., 1925). Strips of cardboard are fastened together by means of an adhesive in the manufacture of a strong material.—J. L. P.

Artificial Threads from Cellulose Derivative Solutions. Societe pour la Fabrication de la Soie "Rhodiaseta." Ger. pat. 403,736. Zellstoff U. Papier 5, 56 (Feb., 1925). The threads are spun in a dry way. The cellulose derivative, dissolved in a volatile solvent, is forced through an aperture and the thread hangs by its own weight. It solidifies as the solvent evaporates.—J. L. P.

Moisture in Glazing. Anon. Zellstoff U. Papier 5, 11 (Jan. 1925). Practical hints on the finishing of paper.—J. L. P.

Preparation of a Highly Glazed Photographic Paper. Firma Carl Blunk. Ger. pat. 407,928. Papierfabr. 23, 101 (Feb. 15, 1925). The paper is provided with two coatings, of which the first consists of lampblack and shellac in a soap emulsion, while the second contains a rosin soap or a soft soap.—J. L. P.

Filtering Material. G. Bonnet. Le Papier, No. 10 (1924); Papierfabr. 23, 6-7 (Jan. 4, 1925). A brief description of the properties, best suited raw materials, their preparation, digestion, bleaching, drying, etc., of cellulosic filtering material, such as employed in the filtering of oils, sirups, wines, etc.—J. L. P.

Composite Insulating Board. G. H. Ellis. U. S. pat. 1,520,284, Dec. 23, 1924. This consists essentially of a double-faced corrugated board, each facing consisting of a multi-ply board containing at least one layer of asphalt.—A. P.-C.

Board Machine. C. G. Robinson, assignor to The Beaver Products Company, Inc. U. S. pat. 1,503,246, July 29, 1924. The wet ends of two or more cylinder board machines are placed over one another, and only one set of driers is provided for all of the machines, the webs from all of which passing through the driers together. The presses are adjusted to remove sufficient water to prevent the webs from sticking together, and on leaving the last drier they are separated and separately calendered and wound.—A. P.-C.

Plaster Board. C. F. Dahlberg. U. S. pat. 1,503,783, Aug. 5, 1924. A heat-insulating plaster board comprises a body portion of compressible fibrous bagasses material with undercut perforations, the acute edges of which are formed of more greatly compressed fibers than the fibers of the main body portion. This body portion is associated with a supporting base of compressible fibrous bagasse material to which the body portion is attached. Both portions are coated with pitch, asphalt or other waterproofing material.—A. P.-C.

Sound-Deadening Fiber Board. J. K. Shaw, assignor to C. F. Dahlberg. U. S. pat. 1,503,605, Aug. 5, 1924. A fiber board is composed of different layers of fibers, all of which are interlaced throughout the body portion of the board. One of the layers is formed of hair and one of them at least is fireproofed. Fibers such as bagasse and wood fiber also may be used in making the different layers.—A. P.-C.

Plaster Board. J. K. Shaw, assignor to C. F. Dahlberg. U. S. pat. 1,503,211, July 29, 1924. A heat-insulating plaster board is formed with a relatively unyielding hard and strong layer of bagasse fibers interlaced with a relatively soft and yielding layer of bagasse fibers, all the bagasse fibers used being associated with their natural pith, and with an attached layer of plaster.—A. P.-C.

Method of Joining Pulp Board. D. M. Sutherland, Jr., assignor to Agasote Millboard Co. U. S. pat. 1,506,509, Aug. 26, 1924. Two edges of portions of substantially uncompressed and spongy board are overlapped, a layer of suitable cement or adhesive is applied between the overlapping portions, and they are then subjected to the action of a hot press to compact the edges into completed pulp board.—A. P.-C.

Process of Manufacturing Building Materials. O. Bradenberger, assignor to Firm Subox A. G. U. S. pat. 1,515,723, Nov. 18, 1924. A building fabric which may be formed of paper or roofing cardboard is coated with lead suboxide together with a substance such as linseed oil which has a reducing action on the lead suboxide. This coating deposits metallic lead on the fabric and renders it resistant to weather and to acid fumes.—A. P.-C.

Plastic Mixture Containing Pitch and Fibrous Material. F. J. Commin. U. S. pat. 1,511,949, Oct. 14, 1924. A material adapted for use as a roofing is prepared by adding to a slurry of cellulosic or other fibrous material a pitch ground to an extremely finely divided and deflocculated condition, in a peptizing solution containing sodium resinate, and felting the product.—A. P.-C.

Method of and Apparatus for the Manufacture of Corrugated Board. K. Wandel. U. S. pats. 1,519,280 and 1,519,281, Dec. 16, 1925. *No. 1,519,280.* The paper is moistened to soften it, corrugated, dried by relatively long contact with a heated element of the corrugating means, and the dried corrugated web is then pressed into contact with asphalt coated surfaces of two facing webs. The whole process is continuous. *No. 1,519,281.* The paper or board is softened by treating with oil, corrugated, and then immediately after pressed upon a facing web coated with asphalt.—A. P.-C.

Method of Making Roofing Material. H. A. Cumfer and O. D. MacFarland, assignors to Flintkote Co. U. S. pat. 1,517,826, Dec. 2, 1924. A sheet of roofing having an adhesive-coated surface is fed adjacent a pattern mechanism which delivers grit on to the sheet in a design pattern on selected areas. The sheet is then passed adjacent a second pattern mechanism which deposits grit on to other areas of the adhesive coating.—A. P.-C.

Roofing Machine. H. A. Cumfer and O. D. MacFarland. U. S. pat. 1,513,969, Nov. 4, 1924. A sheet of roofing coated with an adhesive waterproofing material is fed to a device for feeding granular material of a given size and color to predetermined areas of the roofing determined by endless perforated pattern bands. The sheet then passes to a second feeding device which delivers

TECHNICAL SECTION, PAGE 235

granular material of the same size but different color to the other areas of the roofing.—A. P.-C.

Colloids and the Formation of White Spots in Photographic Emulsion Papers. Th. Bentzen. Paper Trade J. 80, No. 13, 45 (Mar. 26, 1925). Trouble due to white spots which appeared on developing the paper was traced to the presence of humus in the water and of copper in the baryta coating (due to wearing out of the tin lining of the copper kettles in which the coating mixture was prepared). The humic acid combined with the copper to form a compound which retarded the development of the image, making the silver less sensitive wherever it was present and thereby causing white (undeveloped) spots. Humus can also cause trouble with blueprint and offset papers.—A. P.-C.

Stiffening Composition for Fibrous Material. C. E. Swett. U. S. pat. 1,517,520, Dec. 2, 1924. A colloidal product of rosin and ammonia is applied in aqueous solution to fibrous material such as shoe stiffening fabric, and the water is then evaporated.—A. P.-C.

Making Waterproof Paper. L. Kirschbraun. U. S. pats. 1,526,552 and 1,526,553, Feb. 17, 1925. *No. 1,526,552.* A multi-ply sheet is made on a multiple vat cylinder machine, and a film of pitchy or bituminous material is interposed between the plies during the process of formation. *No. 1,526,553.* The sheet is made on a multiple vat cylinder machine, and a bituminous emulsion devoid of fibers is applied to the sheet formed locally in one of the vats.—A. P.-C.

Method for Making Stereotype Mats. A. W. Schorger, assignor to C. F. Burgess Laboratories. U. S. pat. 1,524,155, Jan. 27, 1925. Cooked wood pulp is beaten in water until the fibers separate and develop fibrils. The fibrillated fibers are cooked in alkali to remove gelatinous substances, mixed with clay and the mixture is formed into sheets felted together in superposed layers.—A. P.-C.

Method for Producing Crinkled Paper. E. Klepper. U. S. pat. 1,503,451, July 29, 1924. "Tapestry paper" is obtained by passing a backing sheet over a relatively long flat support, applying paste to the upper side of the sheet while on this support, and then feeding a crinkled tissue paper on to the pasted sheet and drying by means of progressively increasing heat.—A. P.-C.

Multi-Ply Paper. J. H. Greenstreet. U. S. pat. 1,507,372, Sept. 2, 1924. The paper consists of a number of layers secured together by adhesive material, one or more intermediate layers being provided with crushed portions displaced from the normal plane of the paper and overlapping each other and secured together by adhesive material.—A. P.-C.

Paper for Photographic Purposes. E. Schloemann. U. S. pat. 1,504,150, Aug. 5, 1924. In the preparation of paper for photographic purposes, a heated solution of 500 g. of barium chloride in 10 l. of 20% aqueous gelatin solution is mixed with a solution of 300 g. of ammonium sulphate in 2.5 l. of water, the emulsion of colloidally distributed barium sulphate thus formed is allowed to stiffen and is then granulated, washed, remelted and applied to raw paper.—A. P.-C.

Adhesive and Sealing Strip Having a Coating of the Same. F. W. Farrell. U. S. pat. 1,510,472, Oct. 7, 1924. A flexible strip adapted for adhesively sealing various articles under the action of heat comprises a strip of paper coated and somewhat impregnated with a mixture of asphalt 120 parts, sulphur 10 parts and linseed oil or a similar oil 26 parts.—A. P.-C.

Paper-Perforating Mechanism. D. W. Hudson. U. S. pat. 1,509,838, Sept. 30, 1924. The web is moved past a die which is grooved in the direction of web travel. A set of perforating elements registers with the grooves of the die and extend transversely with reference to the path of web movement. They are maintained normally in a retracted position, and means are provided for projecting them in the direction of the die and through the web with a motion which has a longitudinal component with reference to the web, causing tongues to be struck upwardly from the web conforming in shape to the penetrating ends of the perforating elements.—A. P.-C.

TECHNICAL SECTION, PAGE 236

Elastic Paper Sheathing, and Method of Producing Same. E. H. Angier. U. S. pat. 1,507,949, Sept. 9, 1924. Elastic, bag-shaped articles are made by adhesively uniting two layers of paper on transverse lines at spaced intervals, creping the united layers, and dividing the products at points intermediate of the margins of the adhesively united areas.—A. P.-C.

Paper Board Barrel and Method of Making. M. Watson and H. J. Smith assignors to American Fiber Cooperage Co., Inc. U. S. pat. 1,513,141, Oct. 28, 1924. The barrel is built up of adjoining staves, each formed from a blank of paper board and having a depression in its outer wall and a transverse bend adjacent each end, each of the bends providing a groove at the inner side of the barrel and a raised rib at the outer side. The heads are seated in the grooves in the staves, and metallic fastening hoops surround the barrel to maintain the staves and heads in position.—A. P.-C.

Composition for Coating Walls, Wooden Articles, Etc. M. Preiss. U. S. pat. 1,514,226, Nov. 4, 1924. Paper material, e. g. paper shavings of different kinds, is mixed with loading and glue materials, e. g. china clay and glue resin size, and the mixture is ground until complete disintegration of the fibers has been effected. It is then diluted with water and beaten to form a scum. The latter is then thickened and any material which has failed to turn to scum is returned for treatment. The product is pasty and may be applied with a brush.—A. P.-C.

Bread Wrapper. C. A. R. Smith and Baker Perkins, Ltd. Eng. pat. 227,298. A wrapper for bread comprises a sheet of paper dry waxed or impregnated throughout with water-proofing material and provided with marginal bands or portions fully waxed or coated with sealing material. Moisture escapes through the dry waxed part of the wrapper.—A. P.-C.

Coated Paper. G. Belle. Papeterie 46, 350-353, 402-409, 505-510, 605-609, 642-645, 694, 842-845, 942-945, 998-1002, 1097-1102 (1924); 47, 6-10, 213-218, 312-317 (1925). A general study of the raw materials used, of the various operations involved in coating, of the machinery required, and of the various finishes imparted and different types of coated papers.—A. P.-C.

Characteristics of Cable Paper. Pulp & Paper 23, 511-512 (May 7, 1925). Brief outline of the qualities required of paper used in the manufacture of telephone cables and of power transmission cables.—A. P.-C.

Metal-Coated Paper. H. Glootz. Eng. pat. 227,439. In the manufacture of metal-coated paper, two paper webs, each provided on one side with a coating of adhesive and a superposed coating of metal powder, are wound together, with the coatings in contact or separated by a plain smooth web, into a roll which is then beaten or rolled to convert the powder into a continuous film. The webs are then rewound into separate rolls.—A. P.-C.

The Printer and His Paper. J. R. Riddell. World's Paper Tr. Rev. 83, 1108-1112 (Apr. 3, 1925); Paper making 44, 166-169 (Apr. 1925). An explanation of the difficulties encountered by printers with paper.—A. P.-C.

Paper from the Printers' Point of View. World's Paper Tr. Rev. 83, 1166-1176 (Apr. 3, 1925). A discussion of the preceding paper by members of the British Technical Section.—A. P.-C.

Method of Manufacturing Paper Articles. O. Frederer and F. Morgenstein. Eng. pat. 225,667, Dec. 11, 1924. Paper strips coated with adhesive by known processes, are first wound on a cylinder to form rolls, which, after having been removed from the cylinder are submitted in a moulding press to strong pressure exerted upon the edges of the vertical rolls in order to transform them into any desired article. The core on which the paper is wound may have the shape of a cylinder or may be of angular cross section.—A. P.-C.

Machinery

Bark Press Performance. Fibre Making Processes. Pulp & Paper 23, (Apr. 2, 1925). In the course of a series of tests extending over six weeks under ordinary operating conditions, an

old type of American bark press reduced an average moisture content of 72.10% down to 55.80%.—A. P.-C.

Barking of Wood. Albert Fresk. Papierfabr. 23, 36-37 (Jan. 18, 1925). A new barking machine is described.—J. L. P.

Digesters for Cooking of Rags, Wood and Straw. F. Hoyer. Papierfabr. 23, 44-47 (Jan. 25, 1925). A general discussion of digesters of different types for different purposes. Regulators and safety valves are also considered.—J. L. P.

Cleaning and Washing of the Screen. E. G. Litz. Wochbl. Papierfabr. 56, 72-74 (Jan. 17, 1925). Practical directions for the proper care of paper machine screens are given. The use of strong acids, such as sulphuric or hydrochloric, is not advocated. —J. L. P.

Device for Winding Paper Rolls. Andreas Hartweger. Ger. pat. 407,519. Papierfabr. 23, 200 (Mar. 22, 1925). An electrical differential drive is applied to the winding of paper.—J. L. P.

Impression Rolls. Anon. Zellstoff U. Papier 5, 128-130 (Apr. 1925). The following impression rolls, used in paper manufacture, are sketched and described: smooth or vellum rolls, ribbed rolls, and watermarking rolls.—J. L. P.

Study on the Flattening of Paper in the Machine. E. Belani. Papierfabr. 23, 20-22 (Jan. 11, 1925). An investigation into the mechanics of paper flattening by the rolls of the paper machine. J. L. P.

Electric Control Devices for Paper Mills. R. Roestel. Papierfabr. 23, 5-6 (Jan. 4, 1925). Brief descriptions are given of the various control apparatus, electrically operated, employed in paper mills.—J. L. P.

Machine for Making Paper W. Ljungstroem. Swed. pat. 57,686, Nov. 5, 1924. Device for tempering currents and circulation in the mass container.—C. J. W.

Machine for Making Paper. L. Nordstroem and O. Nordstroem. Swed. pat. 57,685, Nov. 5, 1924. Device for taking care of the waste edge strips of paper following the wire cloth.—C. J. W.

Wet Machines Press Roll. R. E. Wagner assignor to A. B. Karlstads-Mekaniska Verkstad. U. S. pat. 1,517,036, Nov. 25, 1924. The roll is provided with annular slots in its surface. The annular portions of the surface remaining between the slots are several times wider than the mouths of the slots, which are sufficiently small that the remaining annular surfaces are capable of pressing the material without forcing it into the slots. The depth of the latter is several times greater than their widths, and they are so proportioned relatively to the width of the remaining annular portions that each slot is capable of receiving and removing at least such quantity of water as is pressed out by each remaining annular portion of the roll surface.—A. P.-C.

Bin for Storing Cut Straw. Veuve Chouanard et Fils and L'Homme et Argy. Fr. pat. Papeterie 47, 172-173 (Feb. 25, 1925). The sides of the bin converge at the bottom and a screw is provided for discharging the material into the digester. In order to be able to charge the bin to a greater density, and also to prevent "arching" or "bridging" of the material, sets of transverse bars are given a horizontal, vertical or other reciprocating motion. —A. P.-C.

Washing Engine. W. A. R. M. McRae. U. S. pat. 1,520,588, Dec. 23, 1924. One or more ribs or riffles are provided in the bottom of the trough to effect collection in the rear of the washer of material which will deposit by gravity, and an opening is provided in the base of the washer so disposed in relation to each riffle that the material which has collected will fall through. —A.P.-C.

Function of the Washing Drum. R. Haas. Paper 34, 471-475 (July 3, 1924). A discussion of the relation between time, water and energy consumption, on the one hand, and efficiency of the washing drum of a bleaching beater, on the other.—A. P.-C.

Mandrel for Paper Winders. J. V. F. Richeux. Fr. pat. 584,-985. It is built up of four boards which form a tube with a square or round hole. There is a longitudinal rib in the center of each board, so that when the sheet is first wound it forms a regular octagon, which eventually becomes a circle. One of the ribs may be made removable, so as to fit in a longitudinal groove in one of the boards; and when starting the reel the end of the paper is placed in the groove and held in position by inserting the rib. —A. P.-C.

Paper Cutter With a Watermarking Device. E. F. Huth. Ger. pat. 409,749. Papierfabr. 23, 200 (Mar. 22, 1925). A photoelectric contrivance is employed for impressing a watermark at the same time the paper passes through the cutter. —J. L. P.

Felt Cleaner. Wm. Sheahan. U. S. pat. 1,526,094, Feb. 10, 1925. A suitable cleaning fluid is blown on to one side of the felt, and suction is applied to the opposite side; and the means for blowing and for applying suction are both moved to and fro across the width of the felt.—A. P.-C.

Sectional Electric Paper Machine Drive. C. W. Fick, assignor to General Electric Co. U. S. pat. 1,527,637, Feb. 24, 1925. A separate synchronous motor is used to drive each section of the machine. Each of the motors has rotatable field and armature members. One of them is arranged for connection to the respective machine section, while means are provided for rotating the other members of the motors to vary the speed relation of the motors.—A. P.-C.

Paper Machine. C. E. Pope. U. S. pat. 1,514,011, Nov. 4, 1924. An endless, wire-protecting and supporting travelling felt is provided co-extensive with that portion of the wire extending over the suction boxes and couch roll, and interposed between the wire and the suction boxes and couch roll.—A. P.-C.

Roofing Machine. C. E. Rahr, assignor to Flintkote Co. U. S. pat. 1,517,582, Dec. 2, 1924. A bituminous-coated roofing sheet, with or without granular surfacing, is fed to a cutter which produces T-shaped incisions at predetermined intervals in the sheet, means are then provided for spreading the flaps of the T-shaped cuts, folding the flaps back on to the roofing, and rolling the folded back portions on to the sheet. The sheet is finally put through a slitter and transverse cutter which severs the sheet into shingle units.—A. P.-C.

Guide Roll for Paper Machines. P. C. Rushen. Eng. pat. 225,734, Dec. 11, 1924. In most guide rolls it is necessary to clamp the inner race of the ball bearing fast on the stationery shaft of the roll and to position the bearing against a shoulder formed on the shaft and enclose it in the body of the roll, thereby requiring accurate measurement of distances on the shaft and in the body of the roll. The patent provides for a construction doing away with the necessity of precision measurements, and the whole roll can be set at any point on a smooth shaft and be secured thereon. By this means the roll can be mounted more rapidly and more easily interchanged; and the bearings can be of standard pattern. A. P.-C.

Papermaking Machine. J. Nuttall. World's Paper Tr. Rev. 83, 1352-1358 (Apr. 24, 1925); Paper making 44, 196-200 (May 1925). A general discussion of the various possible sources of trouble from the stuff tap to the reel.—A. P.-C.

What to Expect from Ball Bearings. G. H. Spencer. Pulp & Paper 23, 514-515 (May 7, 1925). Brief outline of the merits of ball bearings or of roller bearings on paper machines.—A. P.-C.

Soft Rubber Rolls. C. King. Pulp & Paper 23, 531-533 (May 14, 1925). A discussion of the performance and merits of "High Speed News" rubber rolls developed by the B. F. Goodrich Co. —A. P. C.

Paper Folding Machines. B. Schweitzer and W. Pettenkofer. Eng. pat. 224,237. This is an improved device for producing folds on strips of creped paper or paper used in bandages. It consists in the provision of flanged rollers which cooperate with plain rollers and with scrolls for doubling down the edges of the strips as it passes between them, and of grooved and ribbed rollers which cooperate with a folding blade for making a fold in the middle of the strip.—A. P.-C.

Waste Liquor and Gases of the Paper Industry

Survey of the Recent Domestic and Foreign Patent Literature on the Utilization of Waste Liquors and Waste Gases of the Pulp Industry, 1912-1924

By A. Schrohe[1]

Translated, with additions, by Clarence J. West, Chairman Committee on Abstracts and Bibliography, T. A. P. P. I. (Contribution No. 47 of the Committee).

(Continued from last week)

368. 1918. Norwegian 28,655. R. W. Strehlenert. Decomposing sulphite waste to extract organic and inorganic materials. (Modification of 24,140).

The sulphur dioxide is converted into sulphur trioxide in the presence of small quantities of sulphuric acid.

369. 1918. Norwegian 28,913. E. Oman. Dyes from oxylignin or oxylignone.

Oxylignin or oxylignone is converted into nitroso derivatives by reaction with nitrious acid, or substances yielding it, such as a nitrite and acid.

370. 1919. U. S. 1,290,118. W. H. Dickerson. Adhesive from waste sulphite liquor.

An adhesive suitable for use in road building, making sand cores, and for other purposes, is produced by concentrating waste sulphite liquor *in vacuo*, and, during the concentration, adding calcium carbonate in somewhat less amount than that which would be required for complete neutralization of the acid in the liquor.

371. 1919. U. S. 1,291,696. G. T. Bloom. Coating wooden receptacles with waste sulphite liquor constituents.

The inner surfaces of wooden receptacles are coated with concentrated waste sulphite liquor or sulphite pitch of a specific gravity of approximately 1.18, which has not been neutralized. The partly dried elastic coating thus formed renders the vessels suitable for holding oils.

372. 1919. U. S. 1,292,068. J. S. Robeson. Core compound.

An adhesive suitable for use in making sand cores for founding is formed of rosin size and desiccated waste sulphite liquor, with or without petroleum or other oils.

373. 1919 U. S. 1,298,478. V. Drewsen. Acetic acid from waste soda liquor.

Waste soda liquor produced in the manufacture of paper pulp from wood by the soda process is concentrated to about 1.30 specific gravity and mixed with about 10 per cent of sodium hydroxide and about 50 per cent of powdered calcium hydroxide to form a strong porous causticized aggregate. The latter is then heated to about 250° and cooled out of contact with the air and is then extracted with hot water to obtain a strong crude acetate liquor of about 30° Be. Carbon dioxide is passed through this liquor, precipitated sodium bicarbonate is separated, acetic acid is added in an amount equal to about 6 per cent of the solids present to neutralize the carbonate and the resulting solution is filtered and concentrated and sodium acetate is crystallized from it. The waste liquor used as starting material may be that obtained in the treatment of spruce, pine, hemlock, poplar, straw or flax or similar materials with sodium hydroxide (commonly known as "block liquor").

374. 1919. U. S. 1,298,480. V. Drewsen. Acetone and other products from waste soda-pulp liquor.

A dry solid intermediate product suitable for subjection to distillation with superheated steam or dry distillation to produce acetone and other volatile compounds is prepared by concentrating waste liquor from the soda pulp process, adding over 80 percent as much calcium hydroxide as there are solids in the material and eliminating the water from the mixture.

375. 1919. U. S. 1,298,594. N. Statham. Causticized organic material suitable for the production of acetone.

A strong porous material weighing not over 40 lbs. per cubic foot and suitable for the production of acetone and other products by dry distillation with steam, is formed by concentrating waste soda pulp liquor with addition of soda and mixing the concentrated material with quicklime.

376. 1919. U. S. 1,303,177. V. Drewsen. Tanning composition from waste sulphite liquor.

Waste sulphite liquor is heated under pressure of about 100 lbs. per square inch with one or two per cent of calcium hydroxide to maintain the liquor alkaline during the digestion, carbon dioxide is passed through the digested material until it is substantially neutralized the precipitate of ligneous material and calcium sulphite is separated and cooked with an amount of sodium carbonate substantially equivalent to the amount of calcium hydroxide used, to dissolve the ligneous material and precipitate the calcium compounds and after filtering off the solution it is treated while hot with sulphuric acid to precipitate a viscous ligno-tanning material. After the product is cooled and reduced to a powder it may be leached with small quantities of water to remove impurities.

377. 1919. U. S. 1,308,184. Canadian 195,309. D. S. McAfee. Recovering alkali used in pulp digestion.

The sodium carbonate contained in soda ash cinder produced by burning the spent liquor from pulp digestion with sodium hydroxide solution is recausticized by grinding with lime and slaking the latter during the grinding operation.

378. 1919. U. S. 1,310,713. H. C. Reed. Oxalic acid from waste liquors of cellulose manufacture.

Waste liquor from the manufacture of cellulose pulp by the sulphite, sulphate or alkali process is evaporated to a dry or semi-dry condition. This residue is then mixed with about four times its weight of sodium or potassium hydroxide and the mixture is heated in thin layers to 250° for about six hours. After cooling, the product is treated with sufficient water to dissolve out the excess of caustic alkali and soluble organic substances, leaving the sodium oxalate formed in the residue. An additional amount of water is then added to extract the oxalate and oxalic acid is made by conversion of the oxalate into the calcium salt and treatment of the latter with sulphuric acid.

379. 1919. U. S. 1,311,595. C. Ellis. Oil proof paper receptacles.

Solids of waste sulphite liquor mixed with a hygroscopic material such as glycerol are used for rendering paper receptacles proof against the action of oils or fats. Sodium silicate, glue, dextrin, molasses and borax or boric acid may be added.

380. 1919. U. S. 1,315,889. Per Westin. Concentrating solutions.

A solution of sulphite waste or distillery slops or similar substances is alternately mixed with absorbent material such as moss litter and subjected to a drying operation. These steps are repeated until a desired quantity of the dried solution is obtained as a residue in the product. The drying is conducted at a temperature sufficiently low to prevent charring. After drying the material may be cooked to obtain large yields of by-products.

381. 1919. U. S. 1,316,742. J. S. Robeson. Sulphur dyes from sulphite waste liquor.

Waste sulphite liquor is freed from calcium by treatment with ferrous sulphate, the solution is then treated with sodium chloride and the resulting precipitate is heated with sulphur and an alkali sulphide to produce a dye. The latter is a dark powder, soluble in water, which dyes cotton fast brownish-black.

[1] Papierfabricant 23, 30-33, 63-65, 89-92, 158-161, 251-253, 284-287, 293-296, 306-307. (1925).

382. 1919. U. S. 1,320,043. A. B. Foster, Alcohol from waste sulphite liquor.

Waste sulphite liquor is prepared for fermentation to produce alcohol by boiling the liquor with an acid such as sulphuric acid, which is less volatile than sulphur dioxide and then neutralizing at least part of the acidity of the boiled liquor.

383. 1919. U. S. 1,322,043. E. Olsson. Recovery process in the manufacture of sulphate pulp.

The washing liquor known as "black liquor" obtained in the sulphate pulp manufacture is evaporated and the residuum is burned, with the addition of sodium bisulphate to the liquor for the purpose of producing a large amount of sodium sulphide in the burned product.

384. 1919. U. S. 1,322,088. F. G. Breyer, J. A. Singmaster and A. E. Hall. Manufacture of zinc oxide.

In the production of zinc oxide or leaded zinc oxide by the Witherill process, the fuel bed is supplied to the furnace hearth in the form of briquettes; they are made by the use of waste sulphite liquor. The briquettes mentioned in 1,322,089, 1,322,090 and 1,322,091 are also prepared by its use.

385. 1919. U. S. 1,322,142-3. J. A. Singmaster, F. G Breyer and E. H. Bunce. Zinc and lead compounds.

The briquettes mentioned in these patents are prepared with the use of waste sulphite liquor.

386. 1919. U. S. 1,324,417. K. L. E. Thunholm. Apparatus for evaporating waste sulphite liquor.

387. 1919. U. S. 1,324,920. K. H. Moore. Recovering caustic alkali from wood pulp digester liquor.

Concentrated lignin liquor such as is obtained in the manufacture of wood pulp by the use of sulphate and soda is burned and the soda thus obtained is taken up in aqueous solution, the solution filtered and causticized with lime.

388. 1919. British 140,359. Papeteries Berges, Soc. Anon. Lignone compounds; tanning agents.

Halogenated lignone compounds and the like are obtained by treating with halogen or halogenating-agents, particularly chlorine, the waste liquors from the manufacture of paper by treating wood with bisulphites, alkalies, steam, etc., or waste liquors obtained in the retting of flax or other vegetable fibers. The waste liquors may be acidified and treated with steam before the treatment with halogen. In the case of bisulphite waste liquors, they may be given a preliminary treatment with alkalies or alkaline earths under pressure. The products can be obtained as extracts, pastes or dried powders and may be used in tanning.

389. 1919. Canadian 190,864. U. S. 1,384,219 (1921). R. W. Strehlenert. Treating waste liquor from sulphite cellulose factories.

The liquor is subjected to concentration by evaporation, then heated under pressure to decompose the lignosulphites and lignosulphates. The excess heat of decomposition is used to effect the evaporation which may be conducted under vacuum.

390. 1919. Danish 24,617. Kirschbach's Werke. Lubricant.

Graphite, talc or like moneral is mixed with sulphite lye.

391. 1919. Swedish 45,041. H. O. V. Bergstrom. Extracting methyl alcohol and sulphur dioxide in the treatment of cellulose.

Vapors from the boiler are conducted to the boiling liquid from a previous boiling and the liquor is distilled to extract methyl alcohol and sulphur dioxide.

392. 1919. Norwegian 29,970. Stettiner Chamotten Fabrik. Fire brick with sulphite lye binder.

A fireproof material, such as silicon carbide, is formed into bricks with sulphite lye as binder.

393. 1920. U. S. 1,327,105. H. B. Landmark. Tanning solution from waste sulphite liquor.

Waste sulphite liquor is evaporated to a concentration of about 16-18° Be and there are then added to the concentrated liquor about 18 grams of sodium carbonate for each liter of the liquor before evaporation. The liquor is separated from the precipitate formed and sufficient oxalic acid is added to the liquor to precipitate the calcium still remaining in the solution. The liquor is separated from the precipitate and sufficient formic acid is added to it to decompose any saccharate present, after which the solution is concentrated to 27.5° Be. The product so prepared may contain about 24 per cent of tanning substances.

394. 1920. U. S. 1,327,862. F. E. Coombs. Dyeing composition from waste sulphite liquor.

Waste sulphite liquor is subjected to the action of nascent hydrogen to effect a substantial reduction of various organic constituents and produce a material which will dye cotton or wool brownish shades. Iron is preferably used in the liquor for producing the hydrogen as it tends to accentuate the brownish hue produced in dyeing with the product. Lighter shades are produced when other metals such as zinc or tin are used. Reduction may be effected either with or without heating, with or without addition of acid to the liquor and with or without preliminary concentration of the liquor. If a concentrated liquor is desired, the concentration may be effected either before or after the reduction with hydrogen. The dye solution produced may be evaporated to dryness. Details of preparation of the dye bath are given (*cf.* C. A. 14, 848). The waste sulphite liquor, reduced by hydrogen, is also suitable for use as an *insecticide* or *road binder*. Used as an insecticide, it adheres well to leaves of plants. When used as a road binder, it reoxidizes and exerts a good binding action.

395. 1920. U. S. 1,329,300. H. H. Hurt. Burning finely divided fuels.

Finely divided coal is treated with a concentrated aqueous waste sulphite liquor or molasses and the mixture thus formed is fed into a fire bed to support the combustion.

396. 1920. U. S. 1,333,694. N. L. Akerblom. Cymene recovery in sulphite pulp manufacture.

Gases and vapors from a sulphite cellulose boiler are led into a receptacle containing acid for a subsequent boiling operation, most of the acid is tapped off from the lower end of the receptacle and the remaining acid with cymene floating on it is led into another receptacle. The latter is formed with walls converging towards its top and the surface of the liquid in it is so raised (by the introduction of a heavier liquid such as acid) as to force the cymene into the narrow portion and thereby increase the thickness of the layer of cymene to facilitate its drawing off.

397. 1920. U. S. 1,341,250. J. Wingen. Paint containing waste sulphite liquor

A paint is prepared by mixing coloring matter and amyl acetate with waste sulphite liquor.

398. 1920. U. S. 1,342,721. A. Schaefer. Apparatus for recovering sulphur dioxide or other volatile substances from waste sulphite liquor, etc.

399. 1920. U. S. 1,344,691. P. Hein. Refining raw wood pulp liquor.

Raw wood pulp liquor, such as is obtained by the sulphate process, is stirred with wood ashes to remove free sulphuric acid and precipitate calcium compounds.

400. 1920. U. S. 1,345,220. Canadian 197,280. A. E. Nielsen. Treating waste gases and vapors from soda-cellulose factories.

The object of the method is to deodorize waste vapors and recover values from them. Gases and vapors such as are produced in the soda or sulphate process of making cellulose are preferably treated with the "green lime" which is obtained as a waste products in sulphate cellulose factories by the causticizing of the dissolved "melt" from the soda furnace with lime and which contains precipitated calcium carbonate together with small amounts of sodium carbonate and sodium hydroxide. This "green lime" may be employed for treating exhaust gases from the digesters as well as the vapors from the evaporization of the black liquor and gases from the melting furnaces. After ab-

sorption the "green lime" mass is found to contain varying amounts of sodium carbonate, sulphide, sulphate, thiosulphate, sulphite, hydrogen sulphide, organic and sodium thiocyanates, acetone and other ketones and aldehydes and mercaptans. These compounds may be separated and recovered when accumulated in sufficient amounts. After treatment of the "green lime" the remaining gases may be freed of carbon dioxide and then passed into the melting furnace where black ash is undergoing treatment or it may be compressed to effect a further recovery of values from it.

401. 1920. U. S. 1,347,713. E. L. Rinman. Dry distillation of waste liquors from cellulose manufacture.

Waste liquors such as are obtained in the manufacture of cellulose by the sulphite or alkali process are subjected to dry distillation together with steam and a strong base, such as lime, at a temperature below 200° C. until the water present has been distilled off. The temperature is then maintained between 200° and 300° until methyl alcohol has been formed and distilled off and is afterwards maintained at 300 to 500° as long as acetone is formed and distills off.

402. 1920. U. S. 1,361,506. R. W. Strehlenert. Recovering values from waste sulphite liquor.

Acid gases or vapors (such as blow-off digester gas containing sulphur dioxide) are introduced into an autoclave containing waste sulphite liquor from cellulose manufacture and the temperature and pressure are sufficiently raised to convert sulphur dioxide present into sulphuric acid and free sulphur. Gas from the autoclave containing free sulphur is then led to a container where it is oxidized with air to produce sulphur dioxide for continuation of the process.

403. 1920. U. S. 1,361,894. J. A. Noble. Rendering tacky surfaces temporarily non-adhesive.

Tacky surfaces such as cloth coated with rubber or a tar mixture are temporarily rendered non-adhesive by the application to the surface of a solid adhesive material such as "Motan" glue (a by-product from waste sulphite liquors).

404. 1920. Canadian 195,329. I. Söraas. Treating waste lye from sulphite cellulose manufacture.

The liquor is protected from oxidizing agents during the heating under high pressure and at high temperature.

405. 1920. Norwegian 30,733. Zellstoff-Fabrik Waldhof und Otto Luhrs. Freeing sulphite liquors from salts.

The sulphite waste liquors are freed from lime by agents which practically entirely remove the calcium oxide (hence not as sulphate), then concentrated and mixed with sulphuric acid to convert the remaining bases into sulphates, which will separate out as such upon cooling.

406. 1920. Norwegian 30,750. K. G. Carlson. Tanning liquid.

The liquid is composed of tanning extract which is prepared in the known manner from sulphite waste lye, to which is added soap and in certain circumstances one or more acids, but not in so great amount that the fatty acids are precipitated.

407. 1920. British 171,136. Canadian 220,399 (1922). U. S. 1,441,243 (1923). A. Roemer and Deutsch-Koloniale Gerb. und Farbstoff Ges. Tanning material.

Waste sulphite cellulose lye is treated with calcium oxide or carbonate to neutralize the acids and is separated from the precipitate. The calcium is then precipitated by alkali compounds such as sodium carbonate or silicate. Hydrochloric, sulphuric or other acid is added to the resulting solution of sulfolignates in amount equivalent to 50 to 100 per cent of the alkali used in the precipitation. The liquid can then be used for tanning. Instead of acid there may be added salts of metals such as are used in mineral tanning, for instance, aluminum, iron or chromous chloride; the liquids thus obtained can be used directly for tanning. The liquid may be fermented after the addition of the calcium oxide or carbonate and may be concentrated by evaporation after the treatment with the alkali compound.

TECHNICAL SECTION, PAGE 240

408. 1921. U. S. 1,364,418. H. F. Weiss. Pulp and other products from western larch.

Comminuted wood of the western larch is digested with sulphite liquor to produce a pulp and a waste liquor containing the soluble products of the larch and the waste liquor is treated for the recovery of galactan or mucic and oxalic acids or subjected to alcoholic fermentation.

409. 1921. U. S. 1,374,889. A. H. White. Treating waste liquor from soda pulp manufacture.

Waste liquor from soda pulp manufacture is treated with sufficient calcium oxide to heat autogenously the mixture formed to at least 200° and to prevent the temperature from rising above 425° owing to endothermic reactions which are caused with the calcium hydroxide at this temperature. Three pounds of lime may be added for each pound of water in the liquor or 1.5 pounds to each pound of 40° Bé liquor. Before the mixture heats up sufficiently to distill off valuable products it is placed in a rotary retort, still hot from a preceding charge and the retort may be externally heated to facilitate the commencement of the destructive distillation. When the latter is initiated, it continues exothermically with production of water, methyl alcohol, acetone and other products. During the later stages of the distillation, as the temperature rises to about 425°, light oils are produced, which float upon the alcoholic solution. Tarry products are almost absent from the distillates. The solid residue is of a light brown color unless subjected to undue exposure to the maximum distillation temperatures, when it darkens and evolves tarry products. The light brown residue catches fire easily in the air and burns to a white ash, under favorable operation with regeneration of most of the calcium oxide, or under less favorable conditions to a black ash, which yields sodium hydroxide on leaching. The calcined ash contains some sodium carbonate and may be mixed with additional liquor of a succeeding batch in order to increase its final yield of sodium carbonate recoverable by leaching the ash.

410. 1921. U. S. 1,380,142. H. H. Hanson and A. C. Walker. Electroplating.

Soluble constituents of waste sulphite liquor from wood digestion are added to electroplating solutions, *e. g.*, those containing zinc sulphate and magnesium sulphate, in order to improve the quality of the metallic coating formed.

411. 1921. U. S. 1,381,118. O. Gerlach. Heat insulating material.

An insulating material adapted for use in furnace walls is formed by mixing infusorial earth with water to form a paste and then adding dilute sulphite liquor, ammonium carbonate and acetic acid.

412. 1921. U. S. 1,390,435. O. Gerlach and C. B. Lihme. Plastic material for molding.

Material such as a mixture of clay and petroleum coke is rendered immediately plastic by the addition of an acid containing sulphite liquor which produces an effect similar to that of allowing the material to stand in a damp condition for a long time.

413. 1921. U. S. 1,390,647. C. H. Sakryd and H. M. Rosencrans. Lead arsenate.

The suspension properties of lead arsenate are increased by adding to acid lead arsenate, during its manufacture, a small amount of residual digester liquor from pulp making by the sulphite or Kraft process and then filter-pressing the mixture.

414. 1921. U. S. 1,390,735. J. K. Tulfis. Tanning.

Hides are treated with a solution of a dichromate containing aluminum sulphate and magnesium sulphate and reduction and tanning are then effected by treatment with soluble material from waste sulphite liquor.

(*To be continued*)

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

The Cost Association and Its Work*

THOS. J. BURKE, C. A., SECRETARY-TREASURER, COST ASSOCIATION OF THE PAPER INDUSTRY

MR. PRESIDENT AND MEMBERS:

It is with great pleasure that I again address you, in connection with the work being carried on by the Cost Association.

Before taking up that subject, I would like to state that we have had a further increase of membership during the year to 97, a net increase of seven members, and I believe that we shall soon pass the century mark. We need only a little more co-operation from our members and affiliated associations and I know that we could obtain a large increase in membership.

I am constantly receiving communications from mills not at present members, asking for information of one kind or another. We are endeavoring to render them service, but would appreciate it if all of you who are members, would make it a point to endeavor to obtain one new member during the coming year. In the hope that you will do this, we shall shortly send you a list of our present members, to enable you to approach neighboring mills whose names you do not find on this list. I will thank you in advance for any assistance you can give in this connection.

I will now start my report:

Federal Taxes

You will remember that two years ago we drew the industry's attention to the possibilities of obtaining tax refunds, for the years during which the Excess Profits Tax was in operation, under the Special Relief Provisions of the Federal Tax Acts. By arrangement with Mr. E. H. Naylor, I took Mr. J. Austin Smith, an expert on this particular work, to Chicago, where he made several addresses on this subject. I thus felt personally responsible for the statements he made at that time, which aroused a tremendous lot of interest.

Following this, we drew up a Tax Chart from information collected through a specially drawn questionnaire. I am mentioning these facts, because I am glad to say that in, at least, three of the cases put in Mr. Smith's hands, he has been successful in obtaining substantial refunds amounting in all to $70,000. Kindly note that this amount is in excess of the total spent by the industry on the Cost Association during the years I have been associated with it. However, in addition to this, I should mention that other attorneys and accountants have made extensive use of the information we collected on this subject, after being appointed to handle their cases by mill executives whose attention was directed to the subject by us. These other accountants and attorneys also have been successful in many cases, but I am not in a position to state the exact amount collected in these cases. I know, however, that in at least two cases, amounts well in excess of $50,000 were collected, one mill getting a refund of over $65,000 for 1917 and another nearly $90,000, for a claim covering four years. This was, however, a compromised settlement, while the $65,000 included a claim based on other grounds.

In spite of the time that has elapsed (nearly five years now), since few paper manufacturers and converters paid Excess Profits Taxes in 1921, there are still a number of cases outstanding and some of them involve very large amounts. This is a very bad feature of the Federal Tax administration. It was on this account that we decided that the Cost Association should do what it could in connection with the proposed revision of the Federal Revenue Act of 1924. Therefore, last April we suggested to the Executive Secretary of the American Paper and Pulp Association that the Association should appoint a General Tax Committee, which should take in hand the drawing up of a list of recommendations, to be made by the American Paper and Pulp Association, as the Central Organization of the pulp and paper industry, in connection with this revision.

President Norman Wilson of that Association appointed such a committee, and the Secretary-Treasurer of the Cost Association was put on that committee and requested to draw up a brief covering those points which he believed required revision mostly from the view of manufacturers and converters in this industry. Such a brief was prepared and submitted to the Tax Committee, who accepted it with one or two minor alterations. In this brief, an endeavor was made to avoid contentious subjects and to confine it particularly to those phases of the Act which had undoubtedly worked hardships on members of the industry. A copy of this brief was published in the October number of our Journal, "Pulp and Paper Profits," with a suggestion that copies of it should be sent to Senators and Congressmen with a letter urging their support of the recommendations made therein.

Both Mr. Wilson and Dr. Baker have personally thanked us for the assistance given in this matter.

Steam Costs

Partly as a result of the work done by the Cost Association in drawing attention to the large amounts of money being lost annually in the industry in the production of steam, as well as the wasteful manner in which it was used, I believe there has been more general recognition of the importance of measuring, first, the steam produced, and thus getting a cost per 1,000 pounds; and, secondly, measuring the steam used in each department or production center, thereby ascertaining the cost of the steam used therein. Thus you first find whether you are producing steam

* Address delivered before the Convention of the Cost Association of the Paper Industry, held at the Statler Hotel, Buffalo, N. Y., on Friday, November 20, 1925.

economically, and, secondly, whether you are using it economically. It is important that both these factors be recognized, instead of the old-fashioned way of figuring so much coal and so much paper.

I will leave to our technical friends the task of telling you something of the immense savings that have been made by some of the mills, by a thorough examination of their steam and power plants.

Our Wisconsin Division has been collecting figures from a group of mills in that state for some time, and I want to congratulate the Secretary of that Division, who, you will remember, spoke at our last convention on the work he has done in this connection.

I would like to suggest that some of our other Divisions should start such a comparison. I am willing to do the necessary figuring and to send out the sheets monthly, if we cannot find local Secretaries to do the work. The point is, that in view of the differences in the cost of coal, as well as in conditions in the different paper-making centers, it is not advisable to make a general comparison for the industry.

Government Contracts and Costs

In the February number of our Journal we had a short article on the subject of "Government Contracts and Costs," in which we advised that an investigation was to be started regarding whether the governments, either Federal, State or Local, could do work cheaper than by private contract, if they used accurate cost accounting methods. We know they cannot. Work never has been done cheaper by governments than by private parties, and it never will be. There are reasons for this, which it is unnecessary to discuss here, because it is generally recognized that such is the fact.

The point we have to bear in mind is the final result of this investigation, which I regret to say I do not know, but I do know that on one occasion the Public Printer (who, by the way, honored our luncheon meeting at the Waldorf this year with his presence), did suggest some time ago that the government should have a paper mill of its own. We have not heard much about this recently, but if it should come up again, I trust that those responsible for investigating the possibilities of the scheme will thoroughly dissect the methods used by the government in arriving at the costs. If they will do this, I feel sure they will arrive at the conclusion that such a plan is not practicable, and would not be beneficial, and I say this apart from the fact altogether that the principle at stake in such a proposition, namely, that the government should compete with private enterprises, in a bad one. But we must bear one thing in mind, and that is: that the bids made for the supplying of paper to the government show such variations (at least as high as 80 per cent in some cases), that there must arise some doubt in the minds of the committee examining these bids as to the manner in which estimates have been compiled. There is not actually such a variation in manufacturing costs between mills making similar products, at least I, for one, do not believe this.

From inquiries made, my opinion is that this much sought after business is obtained at a very great reduction in price over that prevailing in the trade. Of course, the fact that usually large quantities are required for a definite period has some bearing on this but the unfortunate feature of the whole business is, that these figures receive wide distribution and I am told that other buyers are very apt to refer to them as being reasonable prices, whereas they are just the contrary. In particular, it must be remembered that one item of expense which must be considered in all other estimates, is undoubtedly often omitted from these estimates. I refer to the "selling expense," which some mills consider should be omitted when these bids are made. I do not agree with them on that point, but we need not discuss that at this time.

It is sufficient if attention is drawn to the unfairness of quoting prices for supplying paper to the government which do not net a fair return on the capital invested by the manufacturer, and on the other hand of the unfairness of the Public Printer in suggesting that the government should have a paper mill of its own.

The margin of productive capacity over and above the biggest possible demand in all branches of the industry is large enough to insure keen competition and fair prices. Every bidder should remember, however, that he is to some extent dependent upon his fellow manufacturers for obtaining a fair return on his investment. Each manufacturer who cuts his prices, particularly on this government business, to the extent where he does not obtain a fair return, is to that extent jeopardizing not only his own investment, but the investments of his fellow manufacturers. I would plead, therefore, for greater care in the preparation of these estimates for government business, in view of their detrimental effect upon the trade generally, when prices are quoted which we know cannot represent costs plus a fair profit.

Balance Sheet Ratios

We have collected a number of balance sheets for the past two years, from manufacturers and converters, and we proposed to continue this activity.

A short report was sent out on each balance sheet received and some very favorable comments were sent us as a result of this work.

The most interesting fact which was brought out, however, was that as between the end of 1923 and the end of 1924, there was an increase of approximately 5 per cent in the amount invested in "fixed assets" and a similar increase of approximately 5 per cent in the amount borrowed on the security of these assets. Since "fixed assets," as we all know, swallow up a large proportion of the capital invested, this would not show a very healthy condition. While we recognize clearly the necessity for keeping machinery and equipment up to date, we must also recognize that there is a limit to the percentage of the capital in an undertaking which can be tied up in "fixed assets."

The maintenance of a liquid cash position, particularly in our industry, is very important and, speaking generally, I would say that no mill should tie up more than 60 per cent of its capital in its "fixed asssets." I have seen more than one statement where the total invested capital, plus a million or two more, was tied up in the "fixed assets." Imagine for a moment the position of such a mill in a declining market. In any kind of a market such a mill would be hard pressed for money. In other words, its executive would be constantly on the jump to keep the wheels turning in order to prevent this big investment from being idle. It must keep on working to enable them to get funds to meet their expenses. Then business becomes dull and the pressure for funds increases, so they cut prices irrespective of whether they are getting a fair return on the investment, because they must have money to meet their liabilities.

It is quite a simple proposition, but apparently one that does not receive sufficient consideration from a fair proportion of the executives in the industry. I would, therefore, like to stress the statement: That as liquid a cash position as possible should be maintained, and that great care should at all times be taken to avoid "tying up one's capital to too great an extent."

Of course, the cases mentioned were extreme ones, and there were not many as bad as that, but it was surprising to me to find such a large number of mills that did have a high percentage of their capital tied up in their "fixed assets," leaving an inadequate amount of current assets such as inventories and receivables, which we always have with us, and for general out-of-pocket expenses, such as wages, etc.

Budgets

From the last topic to budgets is an easy step. It was because of the knowledge I gained from the examinations I made of balance sheets received that I began to talk so much about the advisability of preparing a financial budget at certain stated intervals. Whether you choose six months or a year must depend, of course, to some extent on business conditions, but because it may prove difficult for you to prepare such a budget I do not believe that is any

reason why you should not prepare one just the same, and do it as regularly as you post your ledgers. The whole budget must be based to a large extent on the estimates framed of the sales you are likely to make.

Pulp and Paper Industries Fiscal Year

What is the logical time for a manufacturer to ascertain his exact financial position by closing his books and making up a balance sheet? We all, I believe, are in agreement that this should be done as often as possible, which is the reason why all manufacturers should keep a perpetual inventory. However, every organization has to make up a final balance sheet at some period during the year, to find out what profits have been made during the twelve months, and to pay taxes on these profits, and they hope also to pay dividends. It is, of course, a fact that different industries have different "seasons" (where they have seasonal variations—and a goodly proportion do), and from this it is an easy step to see that a manufacturer should choose his slack season as the logical time to clean up and ascertain his financial position by closing out his books.

My object in mentioning this subject is because I wish to make a suggestion that the pulp and paper industry generally would perhaps be well advised to end its fiscal year on June 30th, instead of December 31st, as is now generally done.

I say June 30th, because it is exactly six months after the previous closing date and is also more or less in our slack season. The best time to select is about sixty days after the busiest time, so that sufficient time has elapsed to permit the collection of the outstanding accounts owing for the products sold, at that time. I should think that June 30th would suit, it more or less depending on business conditions in any one year. Another point I believe in favor of that date is the fact that in the case of mills carrying on woods operations, generally speaking, sufficient time has elapsed to permit the accounts to get into the Accounting Department, following the completion of the year's drive, although there is some doubt about this.

I would like to have some comments regarding this date. For instance, whether the inventories are likely to be fairly low at that period, or as low as they are likely to be during any time of the year, except for abnormal conditions.

What we have to do if we want to make any change is to select the time when the business is in its most liquid state, for it is a simple matter to make the change from one rate to another. The stockholders must pass a resolution to have the year end on the date determined on, as the most appropriate for their class of business. As far as tax reports are concerned, all the taxpayer has to do is to notify the commissioner of the desired change sixty days before he wishes to file his report, and he will in due course receive permission. A tax return must then be filed for the part period and the tax paid for this period. The law specifies how the tax is to be computed for this period. After that, he will report for the full twelve months' period in the same manner as he did when he closed his books, and reported for the calendar year

Ought to Find Out Actual Business Year

What we in the paper industry ought to do is to find our actual business year. Is it as I have suggested, from July 1st to June 30th? As far as the public accountant, the banker, and the credit agencies are concerned, it is undoubtedly a fact, that if each industry would select an annual business year in this manner, they could all do their work in a better way, because they would not be so rushed for time as they are now, at the close of the calendar year, and for several months following.

A well-known Milwaukee banker has stated: "That the desire for the best credit information would make us favor permitting business houses to close their books at that time of year when their stocks, accounts and obligations have been most thoroughly liquidated, and when the showing of their profits is real." The whole financial structure of our country is dependent upon the most accurate credit information which can be secured. The credit men have also gone on record in favor of a change of this kind.

Beneficial to Everybody

As for the public accountants, we all know so well the manner in which they have to work night after night during the rush period to imagine for one moment that they are not in favor of a better distribution of their work. It stands to reason that they could do better work if they could spread it over the year, and since the importance of having an outside audit made of one's accounts yearly, is being more fully recognized from year to year, this pressure will increase, rather than decrease, so that any step which can be taken, providing it is not detrimental to business (and this suggestion, on the contrary, is beneficial), to relieve this pressure, must prove mutually beneficial to everybody.

Costs and Stream Pollution

We have during the year drawn attention to the fact that this subject of "stream pollution" is becoming increasingly important to pulp and paper manufacturers. I mention it because we know one case where a paper mill was order to take steps to clarify its effluent or white water before discharging into the river. A modern stock saving installation, consisting of a combination of the screen and sedimentation type was put in, by which the clarified effluent could be used instead of fresh water, and the paper making fibre and the clay (a large quantity of which was used), was returned to the process. The listed capacity of the mill is 35 tons per day. After the installation had been in operation for several months a comparison was made with previous operations, and it was found that this mill, making the same grades and quantity of paper, had reduced its clay furnish by 40 per cent, which would mean it was using two car loads of clay less per week than it did formerly, and it had reduced the cost of obtaining its water by over 60 per cent. In another case, a saving in material upward of 20 per cent of the quantity supplied to the beaters, was made. The furnish on production was reduced from upwards of 120 per cent to less than 101½ per cent, calculated on the oven-dry weight of material and paper.

It can thus be seen that this is a subject of great importance to accountants in the industry, so that I hope we shall have a lively discussion following Mr. Bearce's address, when he will touch on this subject of "Stream Pollution," and the best methods to use in combating it. Mr. Bearce is chairman of the Committee on Waste of the Technical Association.

Superintendents and Costs

At the last convention held by the Superintendents' Association a resolution was passed stating that what the industry needed was greater efficiency in every department and the lowering of costs generally. The resolution urged greater co-operation in all departments of the industry. I trust, therefore, that the gentlemen here present have received better co-operation during the past year from the Production Department, also that in their turn they have been willing to meet the Production Department in co-operating on the problems incidental to the carrying on of their work.

United States Supreme Court and Trade Associations

Several important decisions were rendered during the year by this court which, I am glad to say, were a little more favorable to the Trade Associations, in that they clarified the situation regarding the work which such associations are permitted to do. Since then, the Department of Justice has stated that they will be willing to give an opinion regarding any particular activities that a Trade Association is carrying on or desires to carry on. This is another step forward in the right direction, because prior to this time the Department had always maintained that it was not in a position to give such service, so that all a Trade Association could do was to get the best legal opinion possible and then go ahead.

We have recently published an article in the Cost Section which

COST SECTION

drew attention to the many so-called "hairline" decisions previously given and which showed clearly the difficulties that an association had to contend with, in deciding whether certain activities were legal or otherwise. I mention these facts because they have an important bearing on the work of the Cost Association. As you know, we have always been particularly careful not to even get into the twilight zone, and we intend to keep on being as careful as possible. Our only intent is to assist manufacturers generally in raising the accounting standards of the industry, which necessarily means that there must be uniformity in the cost and general accounting mehods.

We know better now just what we can and cannot do, and have a good opportunity to give very efficient service to our employers. I trust, therefore, that everybody belonging to the Association will fully recognize there is no doubt whatsoever about the legality of any work we undertake, for I can assure you that this side of the question will be fully investigated before any steps are taken to carry it out.

Form T. P.

During the past six months a number of requests have been sent out by the Commissioner of Internal Revenue that mills should fill in and forward to the Department, Form T. P., for the years 1920 to 1923, inclusive. You will remember that this form does not apply to owners of timberlands, for whom a special form, namely, Form T, was drawn up.

Some years ago a committee was appointed by the American Paper and Pulp Association, which made arrangements with Mr. Henry Surface, who was then acting for the government, to send in Form T. P. for years up to 1919 inclusive. It was understood that the form would not have to be sent in after that time; also, that it was not obligatory for this to be done. It was, therefore, a surprise to receive requests to fill in Form TP for the years subsequent to 1919, and I wrote to the Commissioner on the subject. His reply stated that the Department did not wish to be unreasonable and that Form TP was intended as a supplement to the Tax Returns, but that if taxpayers had submitted with the return the information called for in Form TP it would be unnecessary to send in the form. Since then I have heard from a gentleman who was on the original Paper Committee, to the effect that his company made an arrangement whereby they send in with their tax return each year a depreciation schedule, showing exactly how their depreciation for the year has been computed, and its effect on the capital investment. Therefore, when they received the Department's request he wrote the Commissioner, pointing out what they had been doing, and reminded him of this arrangement, and as a result, received a letter advising him that his statements had been investigated and found correct, and, therefore, that he could disregard the previous request to forward Form TP for the year 1920 to 1923.

I have received so many letters in this connection that I thought it might be of interest to some of you here if I mentioned this matter.

Inventory Values December 31, 1920

I would like to touch on this subject, because I know of several cases where a hardship has been worked, owing to the fact that the inventory held at the end of 1920 was over-valued, through poor judgment or inaccurate knowledge on the part of those pricing it. The point, of course, is that there was a very great drop in values, which started about the end of 1920 and continued during the first six months of 1921. Business slumped and it was difficult to estimate values correctly. I would suggest that any mills whose 1920 tax case is still unsettled, should consider this point carefully, if they have not already done so. They must get affidavits from buyers or connections to the effect that certain goods were bought at certain prices, at stated times, and such affidavits will be accepted by the Department, as prima facie evidence of values.

I must warn you, however, that the Department has already collected a lot of information on this point, but since it is a fact that a number of sales were made in different parts of the country at that time, below the current quotations, it should not be difficult to substantiate the fact that your inventory was over-valued, if indeed it was.

That covers fairly well some of the high spots of the work carried on during the year. Of course, there are other activities, but it has been difficult to get much done by the Special Committees appointed last year for the different groups, and I would like very much to have suggestions as to the best way that I could co-operate with those committees in getting the groups making the same product together to compare their cost methods—not figures—but their cost methods. I thank you. (Applause.)

Newton Fall Paper Co. Gives Banquet

NEWTON FALLS, N. Y., December 7, 1925.—The Newton Falls Paper Company tendered a banquet on Thanksgiving Eve in the hotel at Newton Falls to heads of all departments and their wives. The hotel manager, F. McGrath, served a banquet which was appreciated by all who attended. Mr. Leonard, manager of the Benson Mines Company and Clifton Supply Company, was toastmaster, and through his efforts a pleasant evening was enjoyed. After the banquet the party adjourned to the club house, where a satisfactory evening for all who attended was completed.

After the dinner the general manager, W. D. Gregor thanked the department heads for their loyal co-operation and gave a little talk on the progress of the manufacturing end during the last year, in which he stated that the company has been operating at a fair profit for some time and in view of this the directors of the company have authorized a bonus to be paid to all the department heads at Christmas time, and the bonus will be paid according to profits, on the twenty-fifth of December and the fourth of July.

Mr. Gregor's remarks when referring to the equipment of the plant were to the effect that they had done very much in the last year in rearranging and replacing considerable of the equipment as it should be for book paper manufacturing purposes. The original de-inking plant which was practically impossible for the making of a clean sheet of paper, and to avoid a very high shrinkage, has all been changed over and is producing a very high grade of clean stock with a reduction of fully 30 per cent of horse power per ton of pulp produced. The company has also just completed remodelling the wood preparing room for the sulphite mill, which will now put the plant in position to manufacture a perfectly clean sulphite pulp. The paper production of the plant has been increased 38 per cent with the same paper making machines.

Rearrangements which have been made in the electric power development, namely, placing more efficient runners in two of the water wheels and placing direct connected generators to same has enabled the company to discontinue a contract for electric power which amounted to over $50,000 per year.

Kalamazoo Paper Men Discuss Paper Topics

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., December 5, 1925.—Cost accountants and technical men, affiliated with the paper industry in the Kalamazoo Valley, held their joint meeting last Monday evening at the Park-American Hotel. Dinner was served at 6:15, followed by the program. Fred C. Stamm of the Bryant Paper Company talked on "Steam Power Cost." For the past two or three years he has been located in the Wisconsin paper districts, where he has had opportunity to make a close study of the subject at hand.

Harry C. Bradford of the Rex Paper Company and R. H. Hayward of the Kalamazoo Vegetable Parchment Company, attended the cost convention, which was held in Buffalo, November 19 and 20. They reviewed at length two topics studied at the convention, those of "Mill Cost Methods" and "The Use of Scheduled Costs in Paper Mills."

The

ST. REGIS PAPER COMPANY

Daily Capacity
425 TONS

Newsprint, Catalog
Directory Papers
Butchers Manila
Packers Oiled Manila

General Sales Office
49 Wall St., New York

620-621 McCormick Bldg.
Chicago, Ill.

Farmers' Bank Bldg.
Pittsburgh, Pa.

BLUE RIDGE FIBER
Bleached Soda Pulp

Manufactured and sold by
COLUMBIAN PAPER COMPANY
BUENA VISTA VIRGINIA

Samples and Prices upon application

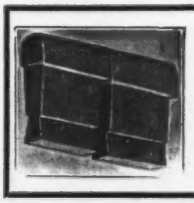
ATTERBURY BROS.
(INCORPORATED)
WOOD PULP, RAGS AND PAPER STOCK, FRENCH CASEINE
145 NASSAU STREET (Potter Bldg.) NEW YORK

PAPER TESTS
In Accordance with T. A. P. P. I. Standard Methods
Oils — Paper — Water — Microphotograph
Electrical, Mechanical, Physical, Chemical and Photometric Tests
ELECTRICAL TESTING LABORATORIES
80th St. & East End Ave., New York

STANDARD PAPER CO.
BOX BOARDS AND BRISTOLS
KALAMAZOO :: MICHIGAN

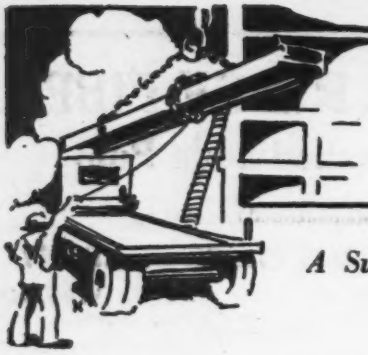
TANKS
Blow Pits, Acid Storage Tanks, Vats, Etc.
Send us your specifications for prompt shipment
Kalamazoo Tank & Silo Co., Kalamazoo, Michigan

GATTI PAPER STOCK CORPORATION
41 East 42nd St., New York
Paper and Woolen Mfrs.' Supplies
COTTON AND WOOLEN WASTE
Warehouse—Hoboken, N. J. Branch Office—Holyoke, Mass.



WIECKERT COGS
Made of Hard Maple
WILL STAND THE STRAIN
THEY WEAR LONGER
WIECKERT LUMBER CO.
Cogs of All Kinds
NEENAH, WISCONSIN

COMBUSTION ENGINEERING CORPORATION
PULVERIZED FUEL
45 BROAD STREET, NEW YORK



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

St. Helens, Ore.—The St. Helens Pulp and Paper Company has engaged E. O. Oberdorfer, Manistee, Mich., engineer, to supervise the construction of its proposed local pulp and paper mill, for which plans are being completed. It will consist of several units, estimated to cost in excess of $500,000, with machinery. W. P. Hawley heads the company.

Appleton, Wis.—The Kimberly-Clark Company, Neenah, Wis., has completed plans and will proceed with the erection of a three-story addition to its local mill, for which a general contract recently was awarded to the C. R. Meyer & Sons Company, 50 State Street, Oshkosh, Wis. It will be 57 x 98 feet, reported to cost close to $50,000, with equipment.

Circleville, Ohio—The Midwest Box Company, 111 West Washington street, Chicago, Ill., manufacturer of paper boxes and containers, has awarded a general contract to Fred Hawkins, 10 West Church street, Newark, Ohio, for the erection of a two-story and basement addition to its plant, 75 x 150 feet, estimated to cost $36,000. Work will be placed in progress immediately. The DeVore Company, Nicholas Building, Toledo, Ohio, is architect. C. E. Raney is manager.

Ridgefield Park, N. J.—Fire December 4, damager a portion of the local mill of the Flintkote Company, manufacturer of paper roofing, etc. An official estimate of loss has not been announced. It is planned to rebuild.

Richmond, Va.—The Albemarle Paper Company, Tredegar street, has filed plans for extensions and improvements in its plant, reported to cost in excess of $75,000, including equipment. It is purposed to develop considerable increased capacity.

Lynn, Mass.—The Hoague-Sprague Corporation, Boston, manufacturer of paper boxes and containers, is making ready for the early installation of equipment in its proposed new local plant, comprising a three-story structure on Broad street, heretofore used as a shoe factory. The building is being remodeled to accommodate the new line of business. The present works of the company will be continued in operation.

Hartford City, Ind.—The Hartford City Paper Company has awarded a general contract to the Indiana Engineering & Construction Company, Fort Wayne, Ind., for the erection of its proposed new addition, 40 x 45 feet, to be equipped for turbine service. Work will be placed under way at once.

New York, N. Y.—Jacob Sonn, 113 West 17th Street, manufacturer of paper containers and boxes, has leased a floor in the building at 135 West Seventeenth street, and will use it for extensions in his plant. New equipment will soon be installed.

Cincinnati, Ohio—The Sabin Robbins Paper Company, Middletown, Ohio, has filed plans for alterations and improvements in its local branch at Ludlow and Canal streets, to be used for general operating service.

Brooklyn, N. Y.—The Gray Envelope Manufacturing Company, 83 33rd street, has leased space in Building No. 9, at the Bush Terminal, for proposed expansion.

New York, N. Y.—Fire, recently, damaged a portion of the plant of S. Rappaport, 161 Perry street, manufacturer of paper boxes and containers. An official estimate of loss has not been announced. The damage will be replaced af an early date.

Nazareth, Pa.—A portion of the plant of the American Paper Box Company, South Whitfield street, was damaged by fire recently. An official estimate of loss has not been announced; it will be replaced.

Toronto, Ont.—The Telfer Paper Box Company has completed plans and will soon begin the erection of a new addition to its plant at Pearl and Duncan streets, reported to cost about $30,000. A general contract has been awarded to the Carswell Construction Company, 58 Wellington street, East.

Three Rivers, Que.—The St. Lawrence Paper Mills, Ltd., Montreal, Que., has completed the construction of a new plant unit on local site, designed for the manufacture of sulphite pulp and plans to begin operations in the structure at an early date. It will have an initial capacity of 80 tons per day.

Great Falls, Man.—Following the award of contract by the Manitoba Pulp and Paper Company, Fort Alexander, Man., to the Manitoba Power Company, Great Falls, for power supply for its local mills, the power organization is perfecting plans for early enlargements in its electric generating station to increase the output from 56,000 hp. to 84,000 hp. A list of machinery to be installed will soon be arranged. Extensions will also be made in transmission system.

New Companies

Chicago, Ill.—The Cloverleaf Manufacturing Company, 2714 South Canal street, has been incorporated with a nominal capital of $5,000, to manufacture paper specialties. The incorporators are H. J. Hamm, R. J. Masters and A. G. Brile.

Wilmington, Del.—The Willette Wood Products Company, care of the Corporation Trust Company, of America, du Pont Building, Wilmington, has been incorporated under Delaware laws with capital of $750,000, to manufacture pulp products, paperboard specialties, etc.

Geneva, N. Y.—The Seneca Paper Company has been incorporated with a capital of $50,000, and 1700 shares of common stock, no par value, to manufacture paper products. The incorporators are W. P. O'Malley, D. W. Lynch and J. G. Kettle. The company is represented by L. G. Hoskins, Geneva, N. Y.

Waterbury, Conn.—The Waterbury Paper Company has filed notice of organization to deal in paper goods. The company is headed by Max Harris, 107 Meadow street, Waterbury.

Lansing, Mich.—The Fisher-Hamilton Wall Paper Company has been incorporated with a capital of $15,000, to deal in wall paper and other paper products. The incorporators are Edmund W. Geller, Charles M. Brownson and Osman E. Fisher, 2027 Edison avenue, Lansing.

St. Louis, Mo.—The Holliston Mills, Inc., has been incorporated with a capital of $43,000, to manufacture and deal in writing papers and other stationery products. Lee P. Russell, 311 North Second street, St. Louis, heads the company.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING DECEMBER 5, 1925

SUMMARY

Cigarette paper .....160 cs.
Wall paper .....64 bls., 20 cs.
Hangings .....36 bls., 514 bls.
Printing paper .....83 rolls, 77 cs., 83 rolls
Wrapping paper .....300 bls., 68 cs.
Packing paper .....9 cs.
Kraft paper .....166 rolls
Colored paper .....57 cs.
Filter paper .....14 cs., 48 bls.
Drawing paper .....38 cs.
Tissue paper .....63 cs.
Crepe paper .....4 pgs.
Surface coated paper .....226 cs.
Fantasia paper .....1 cs.
Fancy paper .....5 cs.
Metal paper .....6 cs.
Writing paper .....9 cs.
Note paper .....2 cs.
Straw board .....251 rolls
Miscellaneous paper ..1885 rolls, 716 bls., 202 cs.

CIGARETTE PAPER

Max Spiegel & Son, Inc., Deutschland, Hamburg, 14 cs.
Liggett & Myers Tobacco Co., Vincent, Havre, 17 cs.
Gluckman & Strauch, Paris, Havre, 3 cs.
P. J. Schweitzer, Pr. Adams, Marseilles, 126 cs.

WALL PAPER

F. J. Emmerich, Deutschland, Hamburg, 7 bls.
Globe Shipping Co., Deutschland, Hamburg, 2 bls.
Bendix Paper Co., Deutschland, Hamburg, 16 cs.
R. F. Downing & Co., Minnewaska, London, 23 bls.
R. F. Downing & Co., Minnewaska, London, 1 cs.
F. J. Emmerich, Minnewaska, London, 13 bls.
F. J. Emmerich, Minnewaska, London, 3 cs.
W. H. S. Lloyd & Co., Laconia, Liverpool, 2 bls.
A. C. Dodman, Jr., Inc., Majestic, London, 10 bls.
F. J. Emmerich, Doric, Liverpool, 7 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnewaska, London, 33 bls.
W. H. S. Lloyd & Co., Minnewaska, London, 3 cs.
A. C. Dodman, Jr., Inc., Doric, Liverpool, 31 bls.
F. & R. Trading Corp., Samland, Antwerp, 483 bls.

PRINTING PAPER

Keuffel & Esser, Deutschland, Hamburg, 83 rolls.
E. Dietzgen & Co., Deutschland, Hamburg, 31 cs.
Perry, Ryer & Co., Cameronia, Glasgow, 24 cs.
P. Puttman, Samland, Antwerp, 20 cs.
Japan Paper Co., Berengaria, Southampton, 2 cs.

WRAPPING PAPER

H. J. Heintze & Co., Gripsholm, Gothenburg, 6 bls.
International Forwarding Co., Deutschland, Hamburg, 45 cs.
Bernard, Judae & Co., Deutschland, Hamburg, 23 cs.
F. C. Strype, Tomalva, Rotterdam, 294 bls.

PACKING PAPER

F. C. Strype, Tomalva, Rotterdam, 9 cs.

KRAFT PAPER

Arkell Safety Bag Co., Gripsholm, Gothenburg, 166 rolls.

COLORED PAPER

E. Dietzgen & Co., Deutschland, Hamburg, 47 cs.
P. H. Petry & Co., Deutschland, Hamburg, 10 cs.

FILTER PAPER

C. Schleicher Schull & Co., Deutschland, Hamburg, 3 cs.
H. Reeve Angel & Co., Inc., Minnewaska, London, 10 cs.
J. Manheimer, Berengaria, Bordeaux, 48 bls.
J. Manheimer, Berengaria, Bordeaux, 1 cs.

DRAWING PAPER

Keuffel & Esser, Deutschland, Hamburg, 29 cs.
H. Reeve Angel & Co., Inc., Minnewaska, London, 5 cs.
Devoe & Reynolds Co., Minnewaska, London, 1 cs.
Favor, Ruhl & Co., Minnewaska, London, 3 cs.

TISSUE PAPER

Wilkinson Bros. & Co., Inc., G. Verdi, Genoa, 51 cs.
F. C. Strype, Laconia, Liverpool, 12 cs.

CREPE PAPER

Globe Shipping Co., Vechtdyk, Rotterdam, 4 pgs.

SURFACE COATED PAPER

Gevaert Co. of America, Vechtdyk, Rotterdam, 50 cs.
Phoenix Shipping Co., Deutschland, Hamburg, 9 cs.
P. C. Zuhlke, Samland, Antwerp, 74 cs.
L. De Jonge & Co., Samland, Antwerp, 63 cs.
Gevaert Co. of America, Samland, Antwerp, 30 cs.

FANTASIA PAPER

L. De Jonge & Co., Samland, Antwerp, 1 cs.

FANCY PAPER

Whiting & Patterson Co., Berengaria, London, 5 cs.

METAL PAPER

Hensel, Bruckman & Lorbacher, Deutschland, Hamburg, 6 cs.

WRITING PAPER

F. L. Kramer & Co., American Trader, London, 4 cs.
Guibout freres, Paris, Havre, 3 cs.
Guibout freres, Berengaria, Havre, 2 cs.

NOTE PAPER

H. Reeve Angel & Co., Inc., Minnewaska, London, 2 cs.

STRAW BOARD

A. Vuyck, Vechtdyk, Rotterdam, 251 rolls.

MISCELLANEOUS PAPER

Hudson Trading Co., Vechtdyk, Rotterdam, 184 rolls.
Hudson Trading Co., Vechtdyk, Rotterdam, 17 bls.
Steiner Paper Corp., Vechtdyk, Rotterdam, 11 pgs.
Universal Paper Co., Gripsholm, Gothenburg, 273 rolls.
Universal Paper Co., Gripsholm, Gothenburg, 50 bls.
Maurice O'Meara Co., Gripsholm, Gothenburg, 249 bls.
The Borregaard Co., Inc., Gripsholm, Gothenburg, 1167 rolls.
The Borregaard Co., Inc., Gripsholm, Gothenburg, 220 bls.
Crepe Kraft Co., Gripsholm, Gothenburg, 43 rolls.
M. M. Cohen, Gripsholm, Gothenburg, 113 b's.
M. M. Cohen, Gripsholm, Gothenburg, 212 rolls.
T. Barret & Son, Gripsholm, Gothenburg, 67 bls.
T. Barret & Son, Gripsholm, Gothenburg, 6 rolls.
W. Hartman & Co., Deutschland, Hamburg, 1 cs.
Keuffel & Esser, Deutschland, Hamburg, 8 cs.
Van Vlaanderen Machine Co., Paris, Havre, 4 cs.
Hudson Forwarding Co., Paris, Havre, 2 cs.
Du Pont Cellophane Co., Paris, Havre, 4 cs.
P. J. Schweitzer, Paris, Havre, 13 cs.
A. Flinn, Paris, Havre, 7 cs.
Standard Products Corp., Paris, Havre, 157 cs.

RAGS, BAGGINGS, ETC.

Amsinck, Sonne & Co., Inc., Hoxie, Manchester, 29 bls. new cuttings.
Marx Maier Papermill Supply Co., Vechtdyk, Rotterdam, 223 bls. bagging.
G. M. Graves Co., Vechtdyk, Rotterdam, 76 bls. rags.
The Stone Bros. Co., Inc., Vechtdyk, Rotterdam, 250 bls. rags.
Chemical National Bank, Vechtdyk, Rotterdam, 12 bls. rags.
E. J. Keller Co., Inc., Vechtdyk, Rotterdam, 58 bls. rags.
A. W. Fenton, Inc., Vechtdyk, Rotterdam, 174 bls. rags.
E. Butterworth & Co., Inc., Vechtdyk, Rotterdam, 74 bls. paper stock.
American Woolstock Corp., Vechtdyk, Rotterdam, 80 bls. rags.
Atlas Waste Manfg. Co., Vechtdyk, Rotterdam, 85 bls. rags.
The Barret Co., Vechtdyk, Rotterdam, 63 bls. rags.
P. Berlowitz, Vechtdyk, Rotterdam, 179 bls. rags.
Atterbury & McKelvey, Vechtdyk, Rotterdam, 197 bls. rags.
C. R. Spence, Gripsholm, Gothenburg, 152 bls. rags.
A. W. Fenton, Inc., Deutschland, Hamburg, 90 bls. rags.
Goldman, Sachs & Co., Deutschland, Hamburg, 25 bls. rags.
Castle & Overton, Inc., Deutschland, Hamburg, 56 bls. bagging.
E. J. Keller Co., Inc., Deutschland, Hamburg, 166 bls. bagging.
E. J. Keller Co., Inc., Deutschland, Hamburg, 286 bls. rags.
Castle & Overton, Inc., Fred VIII, Copenhagen, 380 bls. rags.
State Bank, Fred. VIII, Copenhagen, 1200 bls. rags.
Central National Bank, Fred. VIII, Copenhagen, 400 bls. rags.
Reis & Co., Tomalva, Rotterdam, 24 bls. thread waste.
Garfield National Bank, Tomalva, Rotterdam, 118 bls. rags.
E. J. Keller Co., Inc., Tomalva, Rotterdam, 167 bls. rags.
Royal Manfg. Co., Tomalva, Rotterdam, 17 bls. cotton waste.
P. Berlowitz, Tomalva, Rotterdam, 80 bls. rags.
Castle & Overton, Inc., Tomalva, Rotterdam, 118 bls. bagging.
W. Schall & Co., Lassell, Rio Janiero, 124 bls. new cuttings.
B. D. Kaplan, Laconia, Liverpool, 6 bls. rags.
The Stone Bros. Co., Inc., Laconia, Liverpool, 20 bls. rags.
E. J. Keller Co., Inc., Veendyk, Algiers, 140 bls. rags.
The Stone Bros. Co., Inc., Cameronia, Glasgow, 38 bls. bagging.
Castle & Overton, Inc., Cameronia, Glasgow, 154 bls. paper stock.
M. Snedeker Corp., Cornish Point, Belfast, 95 bls. rags.
Anglo-South American Trust Co., Cornish Point, Dundee, 26 bls. paper stock.
H. Muehlstein & Co., Cornish Point, Leith, 292 bls. rags.
Anglo-South American Trust Co., Suscolanco, Vera Cruz, 89 bls. rags.
Chemical National Bank, Cabo Hatteras, Barcelona, 88 bls. rags.
Maurice O'Meara Co., Cabo Hatteras, Barcelona, 145 bls. bagging.
G. W. Millar Co., Cabo Hatteras, Marseilles, 42 bls. rags.
A. Grifoni, Cabo Hatteras, Leghorn, 483 bls. rags.
Leshner Paperstock Co., Cabo Hatteras, Leghorn, 10 bls. rags.
Albion Trading Co., Vincent, Havre, 44 bls. rags.
Maurice O'Meara Co., Vincent, Havre, 58 bls. rags.
V. Galaup, Vincent, Havre, 43 bls. rags.
Atterbury Bros., Inc., Vincent, Havre, 84 bls. rags.
Gavin & Sonnenberg, Vincent, Havre, 83 bls. rags.
Atlas Waste Manfg. Co., Vincent, Havre, 102 bls. rags.
J. Hinerfeld, Vincent, Havre, 11 bls. rags.
W. Schall & Co., Primero, Buenos Aires, 207 bls. rags.
Brown Bros. & Co., Lutzow, Bremen, 86 bls. bagging.
Castle & Overton, Inc., Lutzow, Bremen, 77 bls. bagging.
Castle & Overton, Inc., Lutzow, Bremen, 5 bls. rags.
Mechanics & Metals National Bank, Lutzow, Bremen, 50 bls. rags.
National City Bank, Lutzow, Bremen, 41 bls. rags.
A. W. Fenton, Inc., Lutzow, Bremen, 117 bls. rags.
Mechanics & Metals National Bank, Sinsinawa, Oran, 192 bls. rags.
Central National Bank, Sinsinawa, Oran, 271 bls. rags.
Anglo-South American Trust Co., Taiho Maru, Leghorn, 39 bls. rags.
Castle & Overton, Inc., Taiho Maru, Leghorn, 34 bls. waste.
Mechanics & Metals National Bank, Taiho Maru, Genoa, 37 bls. bagging.

(*Continued on page 60*)

Imports of Paper and Paper Stock

(*Continued from page 59*)

Equitable Trust Co., G. Washington, Bremen, 94 bls. rags.
A. W. Fenton, Inc., G. Washington, Bremen, 182 bls. rags.
E. J. Keller Co., Inc., G. Washington, Bremen, 32 bls. bagging.
W. Schall & Co., G. Washington, Bremen, 98 bls. rags.
National Bank of Commerce, G. Washington, Bremen, 42 bls. rags.
National Bank of Commerce, Canada, Alexandria, 199 bls. paper stock.
Seaboard National Bank, Estonia, Danzig, 206 bls. bagging.
A. W. Fenton, Inc., Estonia, Danzig, 309 bls. bagging.
Castle & Overton, Inc., Arabic, Hamburg, 107 bls. rags.

OLD ROPE

Brown Bros. & Co., Vechtdyk, Rotterdam, 64 coils.
Darmstadt, Scott & Courtney, Vechtdyk, Rotterdam, 46 coils.
Brown Bros. & Co., Bristol City, Bristol, 137 coils.
Brown Bros. & Co., Primero, Buenos Aires, 20 coils.
Union Trust Co., Cornish Point, Leith, 82 coils.
W. Steck & Co., Vincent, Havre, 63 coils.

MANILA ROPE

Ellermans' Wilson Line, Minnewaska, London, 96 coils.
Republic Bag & Paper Co., Pr. Adams, Shanghai, 349 coils.

CASEIN

T. M. Duche & Sons, Lassell, Buenos Aires, 667 bags.
National City Bank, Vauban, Buenos Aires, 408 bags.

CHINA CLAY

C. T. Wilson & Co., Bristol City, Bristol, 25 casks.

WOOD PULP

E. M. Sergeant & Co., Gripsholm, Gothenburg, 897 bls. dry soda pulp.
Johanson, Wales & Sparre, Inc., Gripsholm, Gothenburg, 299 bls. dry soda pulp.
Bulkley, Dunton & Co., Inc., M. Washington, Trieste, 980 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING DECEMBER 5, 1925

L. H. Abenheimer, Vincent, Havre, 134 bls. bagging.
The Congoleum Co., Vincent, Dunkirk, 346 bls. rags.
Castle & Overton, Inc., Sacandaga, Rotterdam, 136 bls. wood pulp.
Castle & Overton, Inc., ———, Germany, 500 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING DECEMBER 5, 1925

First National Bank of Boston, Lasse'l, Buenos Aires, 634 bags casein.
Brown Bros. & Co., Lassell, Buenos Aires, 918 bags casein.
The Kalbfleisch Corp., Lassell, Buenos Aires, 834 bags casein.
E. J. Keller Co., Inc., Bilderdyk, Rotterdam, 95 bls. rags.
Castle & Overton, Inc., Sacandaga, Rotterdam, 173 bls. wood pulp.
Castle & Overton, Inc., Seattle Spirit, Hamburg, 1375 bls. wood pulp.

NEW ORLEANS IMPORTS

WEEK ENDING DECEMBER 5, 1925

E. J. Keller Co., Inc., West Norranus, Bremen, 133 bls. bagging.
E. J. Keller Co., Inc., West Norranus, Rotterdam, 146 bls. bagging.
Castle & Overton, Inc., Yorck, Germany, 164 bls. rags.
Castle & Overton, Inc., Carplaka, France, 365 bls. rags.
Castle & Overton, Inc., Ostende, Antwerp, 637 bls. rags.
Castle & Overton, Inc., Ostende, France, 376 bls. rags.
Castle & Overton, Inc., Brave Couer, Rotterdam, 104 bls. rags.
Castle & Overton, Inc., Abercos, England, 91 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING DECEMBER 5, 1925

E. H. Bailey & Co., Cornish Point, Leith, 62 cs. paper.
J. A. Steer & Co., Cornish Point, Leith, 35 bls. rags.
A. W. Fenton, Inc., Cornish Point, Leith, 65 bls. rags.
J. A. Steer & Co., Cornish Point, Belfast, 119 bls. rags.
E. J. Keller Co., Inc., West Arrow, Rotterdam, 274 bls. rags.
E. J. Keller Co., Inc., Seattle Spirit, Copenhagen, 252 bls. rags.
Castle & Overton, Inc., Bilderdyk, Rotterdam, 37 bls. carpets.
Castle & Overton, Inc., Hornfels, Germany, 125 bls. rags.
Castle & Overton, Inc., Seattle Spirit, Hamburg, 57 bls. rags.
Castle & Overton, Inc., Samland, Antwerp, 407 bls. rags.
Castle & Overton, Inc., West Arrow, Antwerp, 457 bls. rags.
Castle & Overton, Inc., Arkansas, Norway, 1000 bls. wood pulp.
Castle & Overton, Inc., Seattle Spirit, Hamburg, 750 bls. wood pulp.

Paper and Pulp Production to Expand

Paper and pulp production in the eastern Atlantic States during the last quarter this year will be from 5 to 10 per cent greater than the corresponding period of 1924, according to a survey just completed by the Atlantic States Shippers' Advisory Board.

A. H. Campbell, traffic manager of the International Paper Company, of New York City, and chairman of the Paper and Pulp Committee of the Atlantic States Board, conducted the survey. The committee has found that an average of 25 per cent of the mills in New York, Pennsylvania and New Jersey expected improved activity for the last quarter this year over a year ago; more than 49 per cent estimated that business would be the same, and more than 23 per cent expected "less satisfactory" conditions.

These three states will ship more than 40 per cent of their products during the next three months to points within Central Freight Association territory—that is, territory included in the States of Ohio, Indiana, lower Michigan and part of Illinois. More than 47 per cent of the shipments will go to trunk line or New England territory, and approximately 13 per cent will be transported to points in the South, Southwest and Pacific Coast.

The analysis of the committee shows that more than 33 per cen of inbound shipments for the last quarter will come from Central Freight Association territory; more than 63 per cent from trunk line or New England teritory, and the rest from the South, Southwest and Pacific Coast.

The present car supply was reported as "ample" by a large majority of the mills, and railroad service was described as "good" by a very substantial percentage.

In his report Mr. Campbell explained that the object of this survey was to give the railroads an accurate estimate of the number of cars needed by the paper and pulp industry for the next quarter.

"Formed to create a common meeting ground between shippers and railroad officials," Mr. Campbell explained, "where mutual problems can be solved through co-operation and common sense, the Atlantic States Shippers' Advisory Board has contributed substantially to the improved transportation service which the whole business community now enjoys."

The Atlantic States Board is one of twelve such organizations operating throughout the country. One of their most valuable services is a forecasting of business conditions as measured by freight cars required to transport the products of different industries.

This information is collected and analyzed by the Car Service Division of the American Railway Association at Washington. In this way the railroads are able to anticipate our requirements in various sections of the country, thus avoiding our delays and congestion.

Fire Damages Fidalgo Pulp Mfg. Co.

ANACORTES, Wash., November 28, 1925.—Fire of undetermined origin partially destroyed the digester building of the Fidalgo Pulp Manufacturing Company Saturday morning. The mill had been operating a double shift since the installation of new machinery three weeks ago.

The blaze was discovered at 7:30 o'clock, just before the day crew went on duty, in the tower of the building that houses the huge digester where the paper pulp is cooked. Prompt work on the part of the fire department, employees of the Morrison mill and volunteer workers, saved the plant from destruction.

C. B. Everitt, general manager for the company, cannot estimate the damage at this time. The buildings containing the pulp ready for shipment were not reached by the flames.

The damaged buildings will be rebuilt at once.

For reliable running and average long life

LINDSAY FOURDRINIER WIRES

are unsurpassed

We make them for the largest and fastest machines

Cylinder Wires All Sizes

The Lindsay Wire Weaving Co.

Collinwood Sta. CLEVELAND, OHIO

Specialists in Mortise Gears, Pinions and Cogs for over half a Century

Large assortment of patterns makes it easy to select a pair of gears of the exact ratio and H. P. you require.

All Cogs cut from especially selected Michigan Hard Rock Maple, water cured and Kiln dried. Finished Cogs, dressed and ready to drive in your Gears, furnished according to your specifications.

Send for catalogue showing complete line.

Christiana Machine Company

Christiana, Pa., U. S. A.

AGITATOR DRIVES
FOR
STOCK, COLORS, FILLERS, SIZES
Standard and Special Designs

New England Tank & Tower Co.

30 CHURCH ST., N. Y. EVERETT, MASS.

THE DRAPER FELTS

All kinds and styles of Felts for all kinds and styles of Papers.

Write us about your Felt problems and let us help you reduce your Felt Costs—we will call anywhere at any time.

DRAPER BROS. COMPANY

CANTON, MASS.

Woolen manufacturers since 1856

"THE FOURDRINIER THAT TOOK THE IRE OUT OF WIRE"

INTERNATIONAL WIRE WORKS

MENASHA, WISCONSIN

CARBON BLACK

Special Paper Grades

GODFREY L. CABOT, INC.

940 Old South Bldg. BOSTON, MASS.

Manufacturers for Over Forty Years

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, December 9, 1925.

Business in the local paper industry continues active and the tone of the market is very strong. Demand for the various grades of paper is unusually heavy, stimulated by the near approach of the holiday season, while manufacturers also report that they are receiving a satisfactory number of inquiries for future business. Prices of practically all grades are well maintained and the general outlook at the present time is all that could be desired. The sales organizations of the leading paper houses are winding up a busy year in great style and are looking forward with confidence to the dawn of 1926.

The demand for news print continues to expand, and prices rule very firm. According to R. S. Kellogg, secretary of the News Print Service Bureau, statistics for November show that a record number of pages were printed in the Sunday issues of the leading newspapers last month. Production, at present, states Mr. Kellogg, is greater, and mill stocks are lower than at any previous time this year.

Orders for various grades of board are still numerous and the demand for spot supplies is exceptionally strong. Fine papers are also in great request and innumerable orders are still coming in from the printers. Coarse papers are sharing in the general improvement, which is expected to continue until well over the holidays.

Mechanical Pulp

Trading in the ground wood market is fairly active, although offerings are limited. A satisfactory amount of contract business has been transacted recently. Spot buyers are said to be having some difficulty in securing their requirements. As stocks are diminishing, the tendency of prices is to rise.

Chemical Pulp

Chemical wood pulp continues to be in great demand, and, as the market is greatly over-sold, prices show a strong upward tendency. Both domestic and imported sulphite are in great request. It is reported that the Swedish mills have already disposed of 90 per cent of their kraft output for the forthcoming year. The scarcity of chemical pulp is expected to continue for some time.

Old Rope and Bagging

A steady demand for old rope is being experienced, and orders received by the dealers are just about sufficient to take care of supplies now in the market. Domestic and foreign bagging is moving steadily, mill demand continuing to be for the same grades as formerly. Prices are generally well maintained.

Rags

The demand for domestic rags has improved slightly, and, while the market at present is rather quiet, a considerable expansion of business is anticipated in the new year. The foreign rag situation shows signs of clearing up, and much interest is transpiring in shipments for the early part of next year. Prices are practically unchanged.

Waste Paper

The mill demand for waste paper shows signs of improvement, reflected by the continued strength of the chemical and mechanical pulp markets. Old kraft paper continues in good request. Prices are practically unchanged, at the recently quoted basis.

Twine

The demand for twine is heavy, with the busy shopping season at hand. The continued expansion of the twine market irrespective of the seasonable demand, is confidently expected by many dealers, and a feeling of optimism prevails.

May Reorganize Uncas Paperboard Co.

NORWICH, Conn., December 7, 1925.—Frank W. Browning, receiver of the Uncas Paperboard Company, is ascertaining the sentiment of creditors as to a reorganization of the company.

In a circular just sent out the receiver in part says:

"The plant requires a new beater equipment, built of the latest design of sufficient capacity to furnish stock for two present machines. With good water, cheap power and plenty of beater capacity, this mill, in the judgment of the reciver, can with economical management, be made to show a profit. From estimates made by competent engineers, the present boiler plant will suffice to operate from three to five years more. With the proper expenditure of $350,000, the creditors would have a mill worth at least two million dollars, and able to compete with the best mills of the country.

Creditors conversant with these conditions believe that the present assets of the Uncas Company could be turned to the best advantage of the creditors by the formation of a new syndicate in which the creditors could participate. It is proposed by the syndicate to form a new company with an authorized capital stock of $1,000,0000, divided into 500,000 shares of common stock and $500,000 of preferred stock, and to issue bonds in the amount of $500,000 to provide for working capital, and the liquidation of the present mortgage of the Norwich Savings Society, every creditor to be accorded the opportunity by the syndicate to elect upon what basis he may care to participate in such re-organization.

Good Paper Demand in Boston

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., December 7, 1925.—Demand for all grades of paper in this section continue to be active. The seasonal stride is on and practically every branch of the business is sharing in the upward trend. In the fine grades division activities are brisk, the demand coming from all sources. It was expected that this week would see a slight falling off of general activities as it was expected that all of the holiday orders had been cared for but reports are to the contrary.

The demand for kraft and manila continues. Wrappings and other coarse papers are moving regularly and in generous amounts. The specialty houses, of course, are being taxed to capacity right now and some of the paper box manufacturers are reported working speedily on special orders.

From the mills comes word that business is good with some plants actually behind on orders. The business in the outlying districts is reported as good and the salesmen coming in declare that business compared with last year at this time is far better.

There has been a noticeable increase in the consumption of news print, attributed chiefly to the increase in size of the advertising now being used in the various dailies.

"EASTCO"
BLEACHED SULPHITE

Using "Eastco" Bleached Sulphite ourselves, testing it day by day, in producing our line of "Eastco" Fine Writing Papers, we have complete control—because we have complete knowledge—of its quality, uniformity and adaptability to the requirements of the paper maker.

"Eastco" Bleached Sulphite is good pulp; it makes good paper. Furnished in Bales, Rolls or Laps as required. Write for Samples and Prices.

EASTERN MANUFACTURING COMPANY
292 MADISON AVENUE - NEW YORK CITY

This— department offers you an opportunity to dispose of your surplus material, equipment and supplies.

Take— advantage of it by placing an advertisement in these columns containing a list of what you have to offer.

Established 1895
DANIEL M. HICKS
(INCORPORATED)
PAPER MILL SUPPLIES
200 FIFTH AVENUE, NEW YORK CITY

THE GEORGE M. GRAVES CO., Inc.
Domestic and Foreign
WASTE PAPER — NEW CUTTINGS — HEMP ROPE
OLD RAGS — MANILA ROPE — FLAX WASTE
WOOD PULP — BAGGING — COTTON WASTE
77 SUMMER STREET BOSTON, MASS.

TABER PUMPS

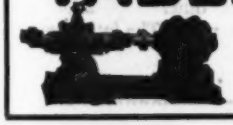



Fig. 510 illustrates Taber SL Double Suction Centrifugal Pump.
TABER PUMP COMPANY
BUFFALO, N. Y.

A. J. BRADLEY MFG. COMPANY
Oiled Stencil Board
Lamp Shade Parchment
IN A VARIETY OF GRADES AND COLORS
101 BEEKMAN STREET NEW YORK

GENERAL **Aluminum Sulphate** CHEMICAL
GENERAL CHEMICAL COMPANY 40 RECTOR STREET, NEW YORK

Marx Maier Paper Mill Supply Corporation
15 East 26th St., New York City
Phone Caledonia 6314-6315
RAGS, NEW CUTTINGS,
WIPERS, ROPE, BAGGING, ETC.

NATRONA PORUS ALUM
Liquid Chlorine
Single Unit Multi Unit Tank Cars
Tank Cars 1-ton Containers 150-lb. Cylinders
Commercial Sulphate of Alumina
Standard Bleaching Powder
PENNSYLVANIA SALT. MFG. COMPANY
PHILADELPHIA, PA.

J. O. Ross Engineering Corp.
30 E. 42nd St.
CHICAGO NEW YORK CITY BOSTON
VAPOR ABSORPTION SYSTEMS

Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, December 9, 1925.

Trading in the miscellaneous markets continues along seasonable lines and prices are generally being well maintained at the recently quoted basis. A satisfactory amount of spot business was reported to have been transacted during the past week while manufacturers state that a large amount of tonnage has already been contracted for on account of next year's requirements. Withdrawals are still proceeding in a satisfactory manner, while inquiries for forward shipments are quite numerous.

BLANC FIXE.—The blanc fixe market remains firm and a steady volume of contract business is being transacted. The pulp is quoted at from $55 to $60 a ton, in bulk, at works. The powder is selling at from $75 to $90 a ton, and from $80 to $85 a ton in less than car load lots.

BLEACHING POWDER.—Orders for bleaching powder are coming along nicely and a good volume of contract business has been booked. The market, however, is expected to become somewhat quieter during the next few weeks, following the usual seasonable trend of this commodity. Prices are holding firm at from $2.00 to $2.40 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—The caustic soda market continues to move along steady lines and the strong movement of supplies on contract experienced during the last few weeks, shows little sign of abatement. Close observers of the market look for a great increase in contract business after the close of the current year. The price of caustic soda is quoted at from $3.10 to $3.15 per 100 pounds, at works. For less than car load lots, the quotation is from $3.76 to $3.91 per 100 pounds.

CASEIN.—Both imported and domestic casein are in good demand at present and the market is generally firm. Domestic casein is now quoted at from 12.50 to 13.00 cents a pound, and foreign casein at from 13.50 to 14.75 a pound.

CHINA CLAY.—A steady, persistent demand continues to prevail for china clay. Leading manufacturers of paper making clay state that their deliveries are not being affected in any way by the freight congestion in the South, contrary to previous reports, which were erroneous, and that all orders are being filled with the utmost promptitude. Domestic wash clay is selling at $8 a ton, f.o.b., mine; and pulverized at $10 a ton. Foreign grades are selling at from $14.50 to $22.50 a ton, ship side.

CHLORINE.—Sales of chlorine are still increasing and a good volume of forward business is being transacted. Manufacturers are expressing the opinion that next year will prove to be the best in the history of the industry. Chlorine is still quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract; while the spot price remains around 4½ cents a pound.

ROSIN.—Prices of rosin are still inclined to fluctuate and at the time of writing there has been a slight decline. An upward movement, however, may be experienced at any time. Stocks are reported to be below normal for this time of the year. The naval stores are quoting paper makers grades of rosin at from $14.50 to $14.75, ship side, in barrels of 280 pounds.

SALT CAKE.—The general tone of the salt cake market continues sound and prices are generally well maintained. A good volume of contract business has been transacted recently. Salt cake is still selling at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—The soda ash market has slowed down a little, and contract withdrawals have been light. The tone of the market, however, is still strong and recent developments are purely seasonable. Manufacturers are receiving a good volume of inquiries for future delivery and the prospects for the forthcoming year are particularly bright. Prices remain firm at from 1.26 to 1.63 cents a pound, in bulk, at works.

STARCH.—Demand for starch for both contract shipments and spot trading continues brisk and manufacturers are naturally pleased with the improvement, which shows no sign of slackening in the near future. Special paper makers starch is quoted at $3.32 per 100 pounds, in bags and barrels.

SULPHATE OF ALUMINA.—Very little change has taken place in the demand for sulphate of alumina, and both spot and contract business is very dull at present. A decided change for the better is looked for, however, in the new year. Prices are firm at from $1.40 to $1.50 per 100 pounds, for commercial grades. The iron free is selling at from $2.00 to $2.30.

SULPHUR.—Sulphur continues to be in good demand and contract withdrawals are proceeding at a satisfactory pace. A good volume of inquiries for future business are being received by the manufacturers. Prices are holding steady at from $15 to $16 a ton, at mine, and from $19 to $30 a ton, in bulk, ship side.

TALC.—The demand for talc is good for this time of the year and the tone of the market is sound. According to grade, talc is quoted at from $17 to $18 a ton.

John Hamilton Derby

[FROM OUR REGULAR CORRESPONDENT]

HUDSON FALLS, N. Y., December 5, 1925.—John Hamilton Derby, one of the pioneer pulp and paper manufacturers of New York State, died last week at his winter home at Orlando, Florida. The deceased was 80 years old and recently suffered a cerebral hemorrhage. He has spent many winters in Florida and last winter purchased a home in Orlando.

Mr. Derby was born in the old village of Sandy Hill and was the only son of George and Jane Howland Derby. He was associated for many years with Howland Pulp and Paper Mills and was also interested in other industrial enterprises. When the firm of Howland & Co. was formed it consisted of John M. Derby, Amasa Howland and Lansing M. Howland, the firm having mills at Baker Falls and Sandy Hill. In 1892, Howland & Co., was reorganized as the Howland Paper Company and Mr. Derby became vice president and a director. The Union Bag and Paper Corporation acquired the Howland properties in 1899 and Mr. Derby was elected one of the first directors of the company.

The deceased was one of the organizers and president of the Sandy Hill Power Company until it was absorbed by the Union Bag and Paper Corporation. He was president of the Sandy Hill National Bank and had been a member of the board of directors of this institution for 41 years. He was one of the first vice president of the Glens Falls Trust Company and was interested also in mining operations in Colorado. In politics he was a republican and for two terms represented his district in the State Senate. The survivors are two sons, Archibald, of Orlando, Florida, and John H. Derby, Jr., of Glens Falls.

The body was brought to his old home here and the funeral was largely attended, all of the industrial and other corporations with which he had been identified being represented. The interment was in Union Cemetery.

Bruce Babcock Leaves Marr-McDonnell Co.

MOUNT HOLLY SPRINGS, Pa., December 7, 1925.—Bruce Babcock has resigned as vice president and secretary of the Marr-McDonnell Company, paper manufacturers of this place. Mr. Babcock is no longer connected with the concern in any manner, having sold all his stock.

Mr. Babcock has been connected with the paper industry for the past thirty-two years. He has no plans for the immediate future and for the present will take a much needed vacation.

Made Directors of Zellerback Paper Co.

SAN FRANCISCO, Cal., December 3, 1925.—Frank C. Stratford, Louis A. Colton and Harold L. Zellerbach have been elected to the board of directors of the Zellerbach Paper Company. As they are experienced paper men, thoroughly conversant with paper, its uses and the requirements of the printers and printing buyers, the company expects by the addition of these men to improve the service it is already rendering.

DRYER FELTS

STANDARD and MULTIPLE PLY

ENGLISH WEAVE

In Two, Three, Four, Five and Six Ply, 60 inches to 176 inches in width.

BY ACTUAL TEST this felt will dry 33 per cent more paper, with ABSOLUTELY NO FELT MARKS IN THE PAPER.

TRIUNE

THREE PLY FELT for other paper

FITCHBURG DUCK MILLS

FITCHBURG - MASSACHUSETTS

Clay

300 tons daily

AMERICAN MADE FOR AMERICAN TRADE

Some portion of our clay production is *pulverized*. That part of it which is *pulverized* is, as far as we know, the only *pulverized clay* which is washed and refined before being pulverized.

This insures greater freedom from impurities and an exceedingly uniform product.

Prices on M-E pulverized clay may surprise you even considering this additional treatment.

Let us submit samples and quote you

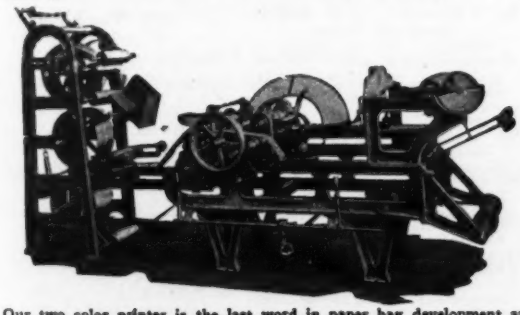
THE

MINER-EDGAR CO.

110 William St.,
NEW YORK

Lowering Cost of Bag Making

by more efficient methods



Our two color printer is the last word in paper bag development and can be applied to any "Fischer Machine."
FISCHER MACHINES make paper bag making pay bigger profits. A marvel of speed and has the ability to stand up in hard service, day in and day out for years.
Every machine made with the greatest care and accuracy and tested before shipping and fully guaranteed.
It pastes, prints the trade-mark, counts and makes the complete bag from the roll. We have some facts and figures as well as the recommendations of users to show you.

Write for full details today.

FISCHER MACHINE CO.

310-316 North Eleventh St.

PHILADELPHIA

SOLVAY

STANDARD IN SODA SINCE 1881

Quality and service guaranteed by the Largest Source of Supply

Soda Ash

Caustic Soda

Over 75 stock distributing points assure prompt shipment with minimum transportation charges.

The Solvay Process Co.

Detroit, Mich.; SYRACUSE, N. Y.; Hutchinson, Kas.

Sales Department:
WING & EVANS, INC.
40 Rector Street, New York

Boston Cincinnati Cleveland Detroit Pittsburgh
Chicago Syracuse Indianapolis Philadelphia
Kansas City St. Louis

Market Quotations

Quoted by Hepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Abitibi Power and Paper, Gen. 6s 1940	100	102
Advance Bag and Paper, 7s 1943	98	100*
Brompton Pulp and Paper, 6s 1927	94	96
Beaver Board, 8s 1933	92	94
Bedford Pulp and Paper, 6½s 1942	98	...
Berkshire Hills Paper Co., 8s 1941	...	80
Beaver Products Corp., 7½s 1942	104	106
Belgo Canadian Paper, 6s 1943	100	102
Brown Paper Co., 8s 1931	102	...
Berlin Mills, 5s 1931	98	...
Bryant Paper Co., 6s 1942	99	102*
Brown Company Serial, 6s 1925-43	97	100
Central Paper 6½s 1925-42	91	94
Cape Breton Pulp and Paper, 6s 1932	100	...
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	101	...
Cherry River Paper, 5s 1929	98	100*
Donnaconna Paper Co., Ltd., 6s 1940	95	100
Eddy Paper, 7½s 1931	100	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	87	95*
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co., 7s 1942	95	99
Gilbert Paper Co., 7s 1927	96	...
Gilbert Paper Co., 6½s 1923-29	101	102*
Hammermill Paper Co., 6s 1930-39	99	...
Hummell, Ross Fibre Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1945	98½*	100
Lake Superior Pulp and Paper, 6s 1941	105	...
Mattagami Pulp and Paper, 6s 1937	90	...
Marinette & Menominee, 7½s 1936	104	...
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	102	105
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	100	...
Paterson Parchment Paper, 5½s 1927-28	98	100
Paterson Parchment, 6s 1938	98	100*
Parker Young Co., 6½s 1944	92	96
Price Bros. & Co., Ltd., 6s 1943	100	...
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordon Co., Series A, 8s 1940	115	118
Riordon Paper, 6s 1924	99	101
Riordan Pulp and Paper, Ltd., 6s, 1929	33	35
River Raisin Paper, 8s 1936	104	106
St. Maurice Paper Co., Ltd., 5½s, 1929	98½	99¾
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	96	99
Smith (Howard) Paper Mills, 6s 1934	98	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	85	92
Spanish River Pulp and Paper, 6s 1931	105	108
Spanish River Pulp and Paper, Gen 8s 1941	106	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	88	93
S. D. Warren Company, 6s, 1945	97	100
Whittaker Paper, 1st 7s 1942	98	...
Watab Paper Co., 6½s 1942	100	104
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	88	90

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	67	70
Abitibi Power and Paper, Pfd.	103	...
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd	77	...
Beaver Board, Com.	4	6
Beaver Board, Pfd.	34	37
Bryant Paper, Cap	12	...
Bryant Paper, Pfd.	9	...
Chicago Mill & Lumber Co., Com	63	...
Chicago Mill & Lumber Co., Pfd.	98	104
Crown Williamette, Com	93	98*
Crown Williamette, 7% A, Pfd.	98	SW
Donnaconna Paper, Com.	49	54
Donnaconna Paper, Pfd.	95	100
Great Northern Paper, Cap.	260	270
Jessup & Moore Paper, Pfd.	85	...
International Paper Co., Com.	55	60
International Paper Co., Pfd. 6%	75	80
Mengel Company, Com.	60	65
Mengel Company, Pfd.	83	93
Oxford Papers, Com.	102	...
Oxford Paper Co., Pfd.	100	...
Provincial Paper Co., Com.	94	98
Provincial Paper Co., Pfd.	99	...
Price Brothers, Cap.	47	50
St. Croix Paper	185	215
St. Maurice Paper Co., Cap.	83	85
St. Regis Paper Co., Cap.	54	56
Spanish River Pulp and Paper, Com.	97	101
Spanish River Pulp and Paper, Pfd.	109	...
Ticonderoga Pulp and Paper, Cap.	145	...
West Virginia Pulp and Paper, Cap.	...	47
West Virginia Pulp and Paper, Pfd.	95	105
Whittaker Paper, Com.	50	...
Whittaker Paper, Pfd.	60	70

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, contract, '26	3.25	@ 3.65
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream		
White No. 1	.80	@ 1.00
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.75	@ .85
Kraft	.90	@ 1.00
Manila	.75	@ .85
Kraft—		
No. 1 Domestic	6.50	@ 7.00
No. 2 Domestic	5.75	@ 6.20
Southern	5.75	@ 6.25
Imported	6.50	@ 7.00
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	5.00	@ 5.50
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.75	@ 3.00
S. Screening	3.00	@ 3.50
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	57.00	@60.00
Chip	42.00	@45.00
Binders' Boards	72.50	@77.50
Sgl. Mla. Ll. Chip.	58.00	@60.00
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported—		
Moist	35.00	@40.00
Dry	38.00	@42.00
(F. o. b. Mill)		
No. 1 Domestic	28.00	@32.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	4.10	@ 4.50
Easy Bleaching	3.25	@ 3.60
No. 1 strong unbleached	2.95	@ 3.25
No. 2 strong unbleached	2.80	@ 2.95
No. 1 Kraft	3.10	@ 3.35
Sulphate—		
Bleached	3.75	@ 4.00
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	4.00	@ 4.75
Easy Bleaching Sulphite	3.00	@ 3.25
News Sulphite	2.75	@ 2.90
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	3.00	@ 3.25
Soda Bleached	4.00	@ 4.25

Domestic Rags

New Rags

Prices to Mill f. o. b. N. Y.		
Shirt Cuttings—		
New White, No. 1	14.50	@15.00
New White, No. 2	8.00	@ 9.00
Silesias No. 1	9.75	@10.50
New Unbleached	14.00	@14.70
Washables	8.00	@ 8.25
Fancy	9.25	@ 9.75
Blue Overall	11.50	@11.75
New Blue Prints	7.25	@ 7.75
New Soft Blacks	5.75	@ 6.00
Mixed Khaki Cuttings	6.75	@ 7.25
Pink Corset Cuttings	11.25	@11.75
Pink Muslin	10.00	@10.50
New Light Seconds	3.50	@ 3.75
O. D. Khaki Cuttings	7.00	@ 7.50
Men's Corduroy	5.75	@ 6.25
New Mixed Blacks	4.00	@ 4.50

Old Rags

White, No. 1—		
Repacked	6.75	@ 7.25
Miscellaneous	6.25	@ 6.75
White, No. 2—		
Repacked	4.00	@ 4.25
Miscellaneous	3.50	@ 3.75
St. Soiled, White	2.90	@ 3.00
Thirds and Blues—		
Repacked	3.75	@ 4.00
Miscellaneous	3.00	@ 3.25
Black Stockings	3.75	@ 4.25
Roofing Rags—		
Cloth Strippings	2.30	@ 2.40
No. 1	2.30	@ 2.40
No. 2	1.90	@ 2.00
No. 3	1.50	@ 1.60
No. 4	1.60	@ 1.70
No. 5A	1.15	@ 1.25

Foreign Rags

New Light Silesias	10.00	@11.00
Light Flannelettes	10.50	@11.75
Unbleached Cottons	14.00	@14.50
New White Cuttings	14.00	@15.00
New Light Oxfords	10.00	@10.50
New Light Prints	9.00	@ 9.50
New Mixed Cuttings	4.25	@ 4.50
New Dark Cuttings	4.00	@ 4.25
No. 1 White Linens	10.00	@11.00
No. 2 White Linens	7.25	@ 8.25
No. 3 White Linens	6.25	@ 6.75
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.25	@ 4.50
Ord. Light Prints	3.25	@ 3.75
Med. Light Prints	2.50	@ 3.00
Dutch Blue Cottons	3.50	@ 4.00
Ger. Blue Cottons	2.75	@ 3.00
Ger. Blue Linens	4.00	@ 4.25
Checks and Blues	3.25	@ 3.50
Linsey Garments	2.10	@ 2.25
Dark Cottons	2.00	@ 2.10
Shoppers	2.00	@ 2.10
French Blues	3.50	@ 4.00

Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—		
Foreign	3.60	@ 4.00
Domestic	3.75	@ 4.00
Wool Tares, light	2.90	@ 3.10
Wool Tares, heavy	3.00	@ 3.25
Bright Bagging	2.85	@ 3.00
Mixed Bagging	2.40	@ 2.50
Sound Bagging	2.10	@ 2.20
Roofing Bagging	1.75	@ 1.80
Small Mixed Rope	2.25	@ 2.50
Manila Rope—		
Foreign	5.50	@ 5.75
Domestic	6.50	@ 7.00
New Bu. Cut	4.00	@ 4.25
Hessian Jute Threads—		
Foreign	4.50	@ 5.00
Domestic	4.25	@ 4.75

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard White, No. 1	3.65	@ 3.85
Hard White, No. 2	3.15	@ 3.25
Soft, White, No. 1	3.00	@ 3.25
Flat Stock—		
Stitch'less	1.35	@ 1.45
Overissue Mag.	1.30	@ 1.40
Solid Flat Book	1.20	@ 1.30
Overissue No. 1	.95	@ .95
Solid Book Ledger	1.75	@ 2.00
Ledger Stock	1.50	@ 1.65
New B. B. Chips	.65	@ .75
Mixed—		
New Env. Cut	2.65	@ 2.80
New Cut No. 1	1.65	@ 2.00
Extra No. 1 old	1.80	@ 1.90
Print	.80	@ .90
Cuttings Board	.65	@ .75
Roong Wrapper	.75	@ .85
Old Kraft Mailing compressed bales	2.45	@ 2.60
News—		
No. 1 White News	2.00	@ 2.10
Strictly Overissue	.75	@ .85
Strictly Folded	.67½	@ .75
No. 1 Mixed Paper	.47½	@ .52½
Common Paper	.50	@ .75

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.42	@ .45
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C. 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.34	@ .41

A Remarkable Range of Grades, Textures and Weights

Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton, prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference that will be lasting.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

B. S. ROY & SON CO. MADE IN AMERICA TEXTILE GRINDING MACHINERY WORCESTER, MASS. U.S.A.

B.S.Roy&Son Co.

Established 1868

Worcester, Mass.

Roy Calender Roll Grinder.

The Roy Calender Grinder is a definite economy in the paper mill. With it you can grind your calender rolls when they become out of true without removing the rolls from the housing. With this tried and true machine you can always keep your rolls in perfect shape.

Made to grind rolls of chilled iron, steel, brass, copper, rubber, paper and fibre.

Write for complete information and names of paper mills using this grinder.

1864 1925

"EXCELSIOR" FELTS

for every grade of

PULP AND PAPER

We continue to maintain at the top the quality of Excelsior Felts, as we have done since we, as pioneers, made the first endless paper machine felts manufactured in America.

Seamless felts for fast running.
Satin Style felts for finish.
Special felts to meet every condition.
Send us your felt problems.

KNOX WOOLEN COMPANY
CAMDEN, MAINE

SOLD BY

BULKLEY, DUNTON & COMPANY

75-77 Duane St., N. Y., and direct

Penn Paper and Stock Company
PACKERS OF ALL GRADES OF
WASTE PAPER
240 N. FRONT STREET PHILADELPHIA

FELTS

H. WATERBURY & SONS CO.
ORISKANY, N. Y.

HAYTON PUMP and BLOWER CO.
APPLETON, WIS.
Centrifugal and Triplex Pumps
FOR ALL PURPOSES
Designing Pumps to Fit All Conditions Our Specialty

Salomon Bros.&Co.

IMPORTERS OF
All Grades of Rag and Paper Stock
200 FIFTH AVENUE, NEW YORK
COTTON WASTE :: LINTERS :: RAMIE

Finished Jute—			
Dark, 18 basis...	.30	@	.31
Light, 18 basis..	.28	@	.30
Jute Wrapping, 3-6 Ply—			
No. 1	.22	@	.24
No. 2	.20½	@	.22½
Tube Rope—			
4-ply and larger..	.16	@	.19
Jute Tube Yarn—			
4-ply and larger..	.20	@	.28
4-ply	.21	@	.24
3-ply	.22	@	.25
Unfinished Jute—			
Basis	.15½	@	.16½
Paper Makers' Twine			
Balls	.12	@	.13
Box Twine, 2-3 ply	.15	@	.17
Jute Rope	.20	@	.40
Ameri. Hemp, 6...	.30	@	.32
Sisal Hay Rope—			
No. 1 Basis	.16	@	.18
No. 2 Basis.....	.10	@	.12
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.20	@	.21

CHICAGO

Paper

F. o. b. Mill			
All Rag Bond.....	35	@	40
No. 1 Rag Bond...	25	@	35
No. 2 Rag Bond...	14	@	25
Water Marked Sulphite	9	@	12
Sulphite Bond.....	7	@	10¾
Sulphite Ledger....	9	@	12
Superfine Writing..	18	@	24
No. 1 Fine Writing	14	@	18
No. 2 Fine Writing	12	@	14
No. 3 Fine Writing	9	@	12
No. 1 M. F. Book.	5½	@	7½
No. 1 S. & S. C. Book	6	@	7¾
Coated Book.....	7½	@	10
Coated Label.....	7½	@	10
News—Roll, mill...	3½	@	4¾
News—Sheets, mill	3¾	@	4¾
No. 1 Manila.....	4¾	@	5¾
No. 1 Fibre.....	4¾	@	5¾
No. 2 Manila.....	4¼	@	4¾
Butchers' Manila...	4	@	4½
No. 1 Kraft.....	6	@	6½
No. 3 Kraft (Northern Grade)	5¾	@	5¾
Kraft (Southern Grade)	4¾	@	5
Wood Tag Boards.	4¼	@	6¾
Sulphite Screenings	3	@	3¼
Manila Tissue, 24x36 sheet	7¼	@	7¾
White Tissue, 20x30 sheet	7¼	@	7½
Boards, per ton—			
(Delivered Central Territory)			
Plain Chip	45.00	@	47.50
Solid News	48.50	@	50.00
Manila Line Chip.	57.50	@	60.00
Container Lined—			
(Delivered Central Territory)			
85 Test	—	@	75.00
100 Test	—	@	80.00

Old Papers

F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.50	@	3.60
White Envel. Cuttings	3.15	@	3.25
No. 1 Soft Shav.	2.90	@	3.00
No. 1 Mixed....	—	@	—
No. 2 Mixed.....	1.15	@	1.20
Ledger and Writings	1.55	@	1.60
Solid Books	1.40	@	1.50
No. 1 Light Books	1.00	@	1.05
Blanks	2.00	@	2.10
Kraft	2.50	@	2.75
New Kraft Cuts.	2.70	@	2.80
Manila Envelope Cuttings	2.40	@	2.50
Ex. No. 1 Manila..	2.00	@	2.10
Print Manila	.90	@	1.00
Folded News (oversissue)	.90	@	.95
Old Newspapers—			
No. 1	.80	@	.85
No. 2	.70	@	.75
Mixed Papers—			
No. 1	.70	@	.75
No. 2	.50	@	.60
Roofing Stocks, f. o. b. Chicago, Net Cash—			
No. 1	47.00	@	52.00
No. 2.....	45.00	@	50.00
No. 3	43.00	@	48.00
No. 4.....	41.00	@	46.00

BOSTON

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag content	.18	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.07½	@	.10½
Rag Content.....	.17	@	.45
All Rag	.36½	@	.51
Writings	.08	@	.20
Superfines	.22	@	.50
News	.04	@	.04½
Book, Super	.08	@	.10
Book, Coated	.09	@	.14
Coated Litho.....	.09½	@	.15
Label	.09½	@	.15
Jute Manila No. 1.	.11	@	.12
Manila, Sul. No. 1.	.05	@	.05
Manila, Sul. No. 2.	.03¾	@	.04½
No. 1 Kraft.....	.05¾	@	.06½
No. 2 Kraft.....	.05½	@	.05¾
Common Bogus.....	.02½	@	.02¾
Straw Board	—	@	50.00
News Board	—	@	47.50
Chip Board	—	@	45.00
Single Manila Pulp lined board	57.50	@	60.00
Single White, patent coated board	75.00	@	82.50
Wood Pulp Board..	80.00	@	85.00
Binder Boards.....	75.00	@	85.00
Tarred Felts—			
Regular	61.00	@	63.00
Slaters	66.00	@	68.00
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	3.75	@	4.00
White Blank News	1.75	@	2.00
Manila Env. Cuttings	2.80	@	3.00
No. 2 Hard White	3.25	@	3.50
No. 1 Soft White..	.02½	@	.03
No. 2 Soft White..	.02½	@	.03
No. 1 Mixed.....	1.60	@	1.75
No. 2 Mixed.....	1.25	@	1.50
Solid Ledger Stock	2.00	@	1.75
No. 1 Books, Heavy	1.25	@	—
No. 1 Books, Light	—	@	1.25
No. 1 New Manila.	2.50	@	2.60
No. 1 Old Manila.	1.75	@	2.00
Print Manila	1.05	@	1.20
Old Kraft	2.25	@	2.35
Overissue News ...	1.00	@	1.10
Old Newspapers ...	.70	@	.85
No. 1 Mixed Paper	.60	@	.47½
Box Board, Chip..	.60	@	.50

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	—	@	3.37½
Domestic	—	@	3.50
Manila Rope	—	@	5.50
Mixed Rope	2.00	@	—
Scrap burlaps ...	—	@	2.37½
Wool Tares, heavy.	2.50	@	2.75
Mixed Strings...	—	@	1.90
New Burlap Cutting	—	@	3.25

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.15½	@	.15
Silesias, No. 1...	.11	@	—
New Unbleached.	.14½	@	.15
Washable	.07¾	@	.08
Fancy	.10½	@	—
Cottons—According to Grades—Blue—			
Blue overalls.....	12½	@	—
New Black, soft...	.07	@	—
Khaki Cuttings.....	.07	@	—
Corduroy	.04	@	.05
New Canvas	.12	@	.12½

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1	10.00	@	—
Repacked	9.50	@	—
Miscellaneous	8.50	@	—
White No. 2—			
Repacked	6.50	@	—
Miscellaneous.....	5.25	@	—
Thirds and Blues—			
Repacked	5.00	@	—
Miscellaneous ...	3.50	@	—
Roofing Stock—			
No. 1	2.15	@	—
No. 2	1.90	@	—
No. 3	1.75	@	—
No. 4	1.90	@	—

PHILADELPHIA

Paper

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2.....	.16	@	.25
Fine, No. 3.....	.12	@	.20
Book, M. F.....	.06¾	@	.07
Book, S. S. & C...	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph.	.09	@	.12
Label	.09	@	.12
News	.03¾	@	.04
No. 1 Jute Manila.	.09½	@	—
Manila Sul., No. 1	.04½	@	.06
Manila No. 3.....	.04	@	.04½
No. 2 Kraft.....	.05¼	@	.05¾
No. 1 Kraft.....	.06½	@	.06½
Common Bogus ...	.02¾	@	—
Straw Board	56.00	@	55.00
News Board	45.00	@	—
Chip Board	47.50	@	—
Wood Pulp Board.	4.50	@	5.00
(Carload Lots)			
Binder Boards—			
Per ton	75.00	@	80.00
Carload lots	65.00	@	70.00
Tarred Felts—			
Regular	66.00	@	68.00
Slaters	70.00	@	72.00
Best Tarred, 1-ply (per roll)	1.85	@	1.95
Best Tarred, 2-ply (per roll)	1.55	@	1.70
Best Tarred, 3-ply.	2.10	@	2.15
No. 1 Mixed Paper	.65	@	.70

Domestic Rags—New

Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.13½	@	.14
New White, No. 2	.06	@	.08
Silesias, No. 1...	.10½	@	.11
New Unbleached.	.14	@	.14½
Washable	.07¾	@	.07¾
Fancy	.09½	@	.10
Cottons—according to grades—			
Blue Overall	.11	@	.12
New Blue.....	.04	@	.04¼
New Black Soft..	.06	@	.06¼
New Light Seconds	.03½	@	.03¾
Khaki Cuttings..	.06½	@	.07
Corduroy	.04	@	.04½
New Canvas	.08¾	@	.09
New Black Mixed	.05	@	.05½

Bagging

F. o. b. Phila.

Gunny, No. 1—			
Foreign	3.00	@	3.35
Domestic	3.00	@	3.25
Manila Rope	4.75	@	6.00
Sisal Rope	2.50	@	—
Mixed Rope	1.00	@	1.25
Scrap Burlaps...	2.25	@	2.50
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings...	1.25	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.25	@	3.50

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.50	@	3.60
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	2.60	@	2.70
No. 2 Soft White	2.00	@	2.20
No. 1 Mixed....	1.50	@	1.60
No. 2 Mixed....	1.00	@	1.10
Solid Ledger Stock.	1.75	@	1.90
Writing Paper	1.60	@	1.80
No. 1 Books, heavy	1.30	@	1.40
No. 2 Books, light.	1.20	@	1.25
No. 1 New Manila.	1.80	@	2.00
No. 1 Old Manila..	1.60	@	1.75
Print Manila.....	1.25	@	1.35
Container Manila..	1.00	@	1.10
Old Kraft	2.00	@	2.10
Common Paper....	.50	@	.60
Straw Board, Chip.	.60	@	.65
Binders Bd., Chip..	.60	@	.65
Over issue News...	.85	@	1.00
Old Newspaper....	.70	@	.75
Old White, No. 1—			
Repacked	6.75	@	7.00
Miscellaneous ...	6.25	@	6.50
White, No. 2—			
Repacked	.05	@	.05¼
Miscellaneous ...	.04¼	@	.05
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous ...	2.75	@	3.00
Black Stockings.	4.25	@	4.50
Roofing Stock—			
No. 1	2.00	@	2.15
No. 2	1.90	@	2.00
No. 3	1.25	@	1.35
No. 4	1.10	@	1.20
No. 5A	1.10	@	1.15
B	1.05	@	1.10
C	1.00	@	1.05

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.10½	@	.13½
Light tinted	.11	@	.13½
Dark tinted	.12½	@	.15
Ledgers (sulphite).	—	@	.13
Ledgers No. 1.....	.36	@	—
Ledgers No. 2.....	.27	@	—
Writing	.09½	@	
Writing S. C.	.10	@	
News f. o. b. Mills—			
Rolls (carloads)..	3.50	@	—
Sheets (carloads).	—	@	4.25
Sheets (2 tons or over)	—	@	4.60
Book—			
No. 1 M. F. (carloads)	8.00	@	—
No. 2 M. F. (carloads)	7.50	@	—
No. 3 M. F. (carloads)	7.00	@	—
No. 1 S. C. (carloads)	8.50	@	—
No. 2 S. C. (carloads)	8.00	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila ...	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.....	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood 30.00		@	32.50
Sulphite easy bleaching	60.00	@	65.00
Sulphite news grade	55.00	@	58.00
Sulphite, bleached	75.00	@	80.00
Sulphate 72.50		@	73.00

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. cut..	3.65	@	—
Soft White Book shavings	—	@	3.15
White Blk, News	1.70	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers ...	1.40	@	—
Manilas—			
New Manila Cut.	—	@	1.60
Printed Manilas..	1.10	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News ...	.90	@	—
No. 1 Mixed Papers	.70	@	—
Domestic Rags—			
Price to mills, f. o. b. Toronto		**Per lb.**	
No. 1 White shirt cuttings	.14½	@	.14¾
No. 2 White shirt cuttings	.08	@	.08½
Fancy shirt cuttings	.09¾	@	.10
No. 1 Old Whites..	—	@	—
Third and blues...	—		—